

Leautifying the frounds flome frounds of Canada by M.H. HOWITT

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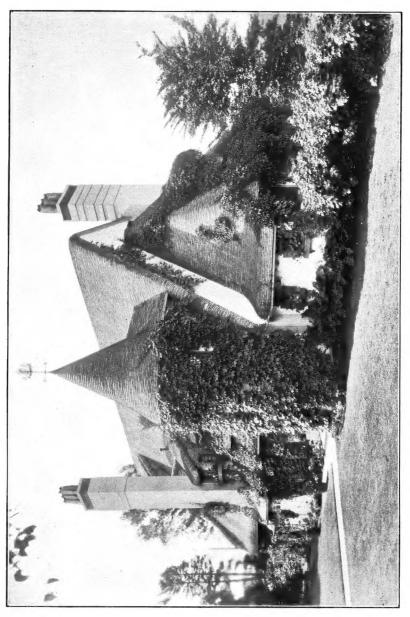
THE EXPERIMENTAL FARMS BRANCH OF THE FEDERAL DEPARTMENT OF AGRICULTURE

and

THE CANADIAN HORTICULTURAL COUNCIL

with the Authority of

THE HON. ROBERT WEIR, MINISTER OF AGRICULTURE OTTAWA, 1930



An attractive home made more pleasing by judicious planting.

Beautifying the Home Grounds of Canada

by M. H. HOWITT

PREFACE

HERE is much interest in the beautification of home surroundings in Canada. Never in the history of the Dominion was the desire as great to make the home attractive as it is to-day, and everything possible should be done to encourage those, who have this desire, to carry out some good plan.

There are so many things in modern life to lessen the influence of the home that it needs something to make it more and more attractive in order to hold and increase the attachment to

this important centre of national life, hence the planting of the grounds commends itself to parents who know the value of making their homes as attractive as possible for their children.

Young married people also, who have just become housekeepers, seek to make their homes as attractive or more attractive than the old homes they have left, and, while they may be unable to do this by inside furnishing, the adornment of the grounds with beautiful trees, shrubs, and flowers can be accomplished with relatively little expense. This gives their house a charm which may be quite equal to, if not greater than, their father's homes.

Believing that a great service could be done Canadians by placing in their hands a booklet, which would give them, in a concise form, the principles of landscape gardening and the kinds and varieties of trees, shrubs, and herbaceous plants most suited to different parts of Canada, the Canadian Horticultural Council, through its Committees on Publicity and Plant Registration and Ornamental Horticulture, arranged with the author to prepare the matter contained in it. Mr. M. H. Howitt has had a very thorough training in landscape architecture, and the advice given will be found to be reliable and good.

There have been very few books on Horticulture published in Canada, and this will fill a long felt want.

All the plants mentioned in this book can be purchased from Canadian sources, and it is thus not necessary to go outside of Canada to obtain them. The great advantage of procuring plants in Canada is that no troublesome regulations have to be complied with when ordering or recening the plants; furthermore, the chances of obtaining redress are much greater if the plants are not satisfactory; Canadian grown plants are more likely to arrive in good condition than if obtained from other countries; and the plants are just as good if not better in quality than those which can be obtained elsewhere. If bought in other countries, the greater cost of transportation, the chances that some of the plants will be dead on arrival, and the uncertainty of their being true to name make the Canadian product the more attractive proposition. And, lastly, the feeling that one is doing something to build up Canadian industries should be a strong influence in inducing horticulturists to patronize home products.

W. T. MACOUN,

Chairman, Committee on Plant Registration

and Ornamental Horticulture,
CANADIAN HORTICULTURAL COUNCIL,
OTTAWA, CANADA

Introduction — Historical

SINCE the beginning of time, men and women have taken a keen interest in ornamental gardening. This desire for beauty about the home has persisted throughout the centuries in spite of all difficulties and we, the gardeners of today, continue that interest and keep the ancient tradition green.

As inspiration in our work we have records of ancient Egyptian gardens which were considered of great size and beauty in their day. We also read of the splendors of the terraced or hanging gardens of Babylon which were also considered the finest of their time althought they were more architectural than horticultural in treatment and comparatively few plants could be used. About the same time magnificent gardens were known in Persia and Assyria and travellers in those days sang their praises. These are the gardens of antiquity, whence has sprung all garden design, to be finally carried to all corners of the globe, greatly modified of course through the changing centuries.

From these early gardens the art of design spread to Greece and then to Rome and as these empires increased in splendor so did their gardens. The Romans carried on the tradition very successfully but with the dissolution of the Empire, gardening fell on evil times for a long period. It was finally revived in the Europe which followed the Roman Empire and in which we are most interested as being the direct source of our tradition.

In this Europe, the art of gardening was largely fostered by the monks, through the long centuries of almost continuous warfare of mediaeval times, which followed. In their "cloister garths" they kept gardening alive through the so called "dark ages". Even the strongly fortified castle, however, had its small garden enclosure for the pleasure of the lady of the castle.

As the strength of the individual barons or rulers of those times waned, and the country became united and free from internal strife and invasions, men began to build out in the open. Now they chose the lower, open lands instead of the inaccessible peaks in deep forests, necessitated formerly for defensive purposes.

Then came an unprecedented expansion of gardening all over Europe broken only by an occasional set-back due to wars. This expansion resulted finally in a complete "Renaissance" or new birth of the art of garden design and some of the finest gardens built at this period have lasted even to this day as classic examples especially those of Italy.

Various countries of Europe developed vigorous and individual styles of their own to suit their peculiar modes of living and desires for entertaining guests and these gradually became known as the English Style; French Style and Italian Style. Some lesser styles also sprang up due to individuality of architecture, topography and temperament of the people and therefore one hears of the Dutch Style; Spanish Style and German Style.

The three styles mentioned first have, however, had the most pronounced effect on our Canadian gardens, through the direct influence of our pioneer ancestors of British stock and indirectly from the American influence.

THE ENGLISH STYLE. The beginning of garden interest in England after quietness settled on the land was the somewhat formal "Tudor Garden" which later on was more fully developed and passed through two familiar stages known as the "Elizabethan" and "Stuart" after the respective monarchs.

After this preliminary period of formality (to the middle of the 18th century) English gardens came under the influence of the Gardening art as practiced in France, Italy and Holland. This was very formal and the designers went to extremes in the subjection of horticulture to man's art.

Then a reaction set in against formality and gardeners turned to informality and the "English Landscape School" was born. This new type of design was strictly natural and park like in character and it is from the gardens of this period that the name "English style" is taken. Later on, a certain amount of formality was introduced in enclosed gardens and formal walks were much in evidence but usually (and correctly) these were kept separated and screened from each other. This English style was marked by broad sweeping lawns, curving drives and large masses of woodland. The drives passed through dense woods and open glades to reach the home set in the park-like lawn.

The English Style spread to the continent and "Jardins Anglaise" were laid out in the French schemes and English Parks in the German designs.

English gardens have passed through so many phases that it is difficult today to say just what is essentially English and yet there is an atmosphere quite distinctive about them. In spite of these many modifications and changes the English style continues to be thought of today as park like informality.

THE ITALIAN STYLE is distinguished by a typical terracing, (owing to the hilly country) each level of which was usually treated somewhat differently and distinctly in a formal manner. Much garden furniture and architectural structures, (fountains, steps, ramps, pergolas, summer houses) were used and the planting also was clipped and formal. The whole layout was intimately connected with the casino (house) and suggested a succession of outdoor

living rooms. This type of design is the forerunner of our modern formal gardens and many are patterned after it.

THE FRENCH STYLE is formal also with terraces, though not nearly as steep (the country was rolling and not mountainous) as the Italian. Much garden furniture is used particularly urns, statuary and treillage. Fountains and pools are much in evidence, the latter often attaining great size, and being valued for reflecting the surroundings. The familiar carpet bedding still seen in our parks is a modification of the favorite form of the flower treatment used in this style, which was known as the parterre. The parterres were designed in intricate patterns usually of gaily colored plants kept low and even by clipping.

These two styles also spread to other countries and we find gardens of Italian and French influence in England as well as Italian influence in France and vice versa.

The English and Italian styles have influenced Landscape Architecture in this country and on the west coast the most, along with a certain amount of Spanish influence, particularly in the south. Gradually we are evolving a style all our own which is becoming typical. With the exception of British Columbia and Southern Ontario, the severity of our climate does not permit of indulgence in the Southern European types of either architecture or landscape architecture. Our best procedure, therefore, is to hold to the modified English style which calls for open lawns bounded by shrubbery and trees with a formal garden if desired, distinctly segregated from the rest of the grounds while closely related and united to the house.

This is our heritage from the past down the ages to our pioneer forefathers who carried the traditions through those early difficult days of making a home in the wilderness. The genuine awakening of interest in landscape architecture in Canada indicates that this heritage will not be lost. We should aim to develop a Canadian style, which may be somewhat influenced by the United States but which will be Canadian and will show greater English influence through our more direct descent.

N.B.—This very brief treatment of the history of Landscape Architecture may have aroused the interest of some readers for more detailed information. In fact such history is an enthralling subject for study and the reader is referred to the following works, among many:

Garden Craft in Europe—H. Inigo Triggs (B. T. Batsford, London). Mediaeval Gardens—Sir Frank Crisp (Brentano, New York).

A History of Gardening in England—Hon. Alicia (Amherst) Cecil (E. P. Dutton and Co., New York).

Old Fashioned Gardening—Grace Tabor (Robert M. McBride and Co., New York).

English Pleasure Gardens—Rose Standish Nichols (MacMillan Co., Toronto, Canada).

Landscape Architecture

Arranging and Planting the Home Grounds

O the beginner or even somewhat experienced person, the term Landscape Architecture or Landscape Gardening, suggests at least the planning of a large suburban property, if not a vast estate. Nothing could be farther from the truth, however, and it will be the aim of this booklet to show how the principles of correct planning may be applied to the small place as well as the large. Even though one is about to plant only two or three trees, a few shrubs and some perennials, there is a desirable and pleasing way for the best possible effect. Properly arranged they add to the attractiveness and convenience of the house, while improperly placed with no thought they will appear spotty, stereotyped, and lacking in individuality. (Figure No. 1 will explain this point).

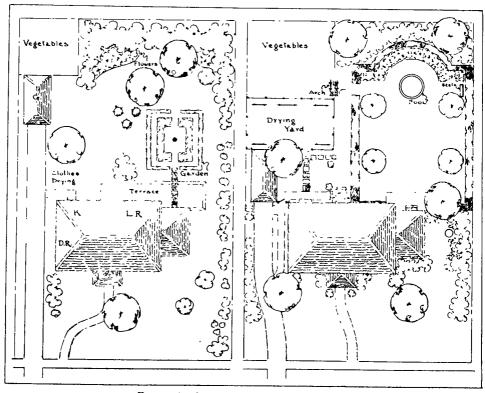


FIGURE 1. BEFORE DESIGNING AND AFTER.

The left hand plan of Figure I shows a home lot that is poorly designed from an artistic standpoint and lacking in the economical use of available space.

From the standpoint of design the plan violates several principles of good landscape architecture. Note the following points. The bareness of the house foundation and the almost continuous scattered planting along the right hand boundary. The small formal garden is placed axially but is too small and inadequate Poorly as well as being set in the middle of the lawn where designed it cuts into the informality of that area. The three evergreens nearby with no apparent relation to the other plantings are typical of poor design as well as the irregular breaking up of the flower border at the back. The clothes hanging on the line can be viewed from any point in the back area which is hardly good taste. The terrace in the rear is an example of one that does not seem to begin or end anywhere in particular, or to be necessary except as a means of disposing of material dug from the cellar.

Considered from the standpoint of economy of space there are too many odd spaces which are not truly usable. Then the garage spaced.

is too far to the rear which has meant the building of unnecessary road in front and the crowding of a very useful area in the rear.

After looking over all these undesirable points in the first plan let us study the second on the right, and discover wherein it has been improved. First note the adequately planted base of the building and the front lawn area with a wise placing of trees for home enframent. Also notice that the rear lawn has been definitely cut off from the front and an interesting area developed immediately off the porch.

Next the rear lawn has been unified and the whole treated somewhat formally. See how much larger it appears with the flower border united in the rear also backed up by the strong shrubbery and tree planting. The four small trees could very well be taken out and the border extended along the sides as well.

Finally the terrace at the rear porch steps now bears a definite relation to the garden axis though it would be better to replace it entirely with a low retaining wall and supply the necessary steps to reach the lower level.

One of the first considerations in planning the home grounds is the blocking out of the ground areas to suit the living conditions of the family. These ground areas may very well be compared with the plan of the house itself and the varying treatment of the individual areas to that of furnishing the different rooms. By ground areas is meant the following:

- 1. Those portions devoted to the service of the home, such as
 - (a) space occupied by the drive, garage turn and the garage,
 - (b) the laundry drying yard,
 - (c) poultry yard, and(d) vegetable garden.

These should be grouped together in close proximity to the kitchen and kitchen entrance for greater convenience and seclusion. Such features, though not necessarily ugly, are still utilitarian, and in the

features, though not necessarily ugly, are still utilitarian, and in the well ordered place should be wholly or at least partially screened from the true living or pleasure quarters.

- 2. Those portions used for ornamental purposes, a setting for the house and for the pleasures of out door living such as:
 - (a) the front lawn,
 - (b) side lawn,
 - (c) the back or private lawn, and
 - (d) any other special feature.

These should be grouped and blocked out of a size and shape to meet conditions. The formal or flower garden may be classed as a special feature and such a garden will often take the place of or form a part of the back or private lawn closely linked with the house. Some times the front and side lawns will merge to form a setting for the home or the rear and side lawns merge to form larger living quarters. At no time, however, should a barricade or screening for the rear lawn be omitted.

- 3. Those portions devoted to sports, games or children's play:
 - (a) Tennis,
 - (b) Swimming,
 - (c) Lawn games.

These are closely associated with the pleasure grounds and often features of this area. This is especially true of lawn games and children's play.

Some will prefer emphasizing one feature while others will prefer another and no one arrangement of these areas will meet every garden need. In fact it is an individual problem and they may be made to fit any plot and so adjusted as to give the greatest convenience and economy of space. Indeed economy of space, orderliness and above all, usefulness are the truest tests of the art of Landscape Architecture.

The Economical Division of Property

Figure 2, though self explanatory will bear a few comments.

The most desirable proportions and arrangements of these areas is an individual problem of every property owner and will depend on the degree of his desire for privacy and the needs for carrying on the necessary services of the household. On his decisions in this respect will very largely rest the disposition of the outdoor living quarters not that they are less important but that they are inter-dependent one with another.

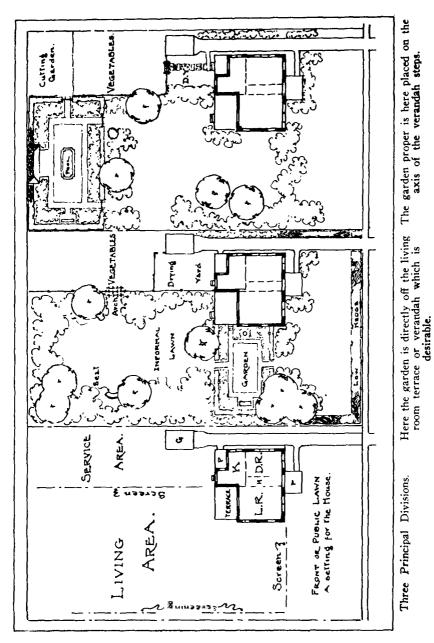


FIGURE 2. CONSIDER THE ECONOMICAL DIVISION OF THE PROPERTY.

In the illustration the areas have been laid out as suggested in the text and then developed. The centre plan shows a rear lawn treated naturally with a formal garden developed off a side axis of the house (verandah steps). The front lawn has been definitely separated. If the formal garden were not desired, the front lawn could be extended to the side but should be divided by shrubbery somewhere about the rear line of the house.

In the plan on the right, the side lawn has been taken advantage of to add to the size of the rear or living lawn with the screening placed in line with the front of the house. Advantage has also been taken of the verandah or terrace steps to form an axis on which to relate a formal garden in the rear of the property.

In this case the whole area now devoted to the formal and cutting gardens as well as vegetables could readily be devoted to play or games with the entrances considered as ornamental features and placed on the axes.

In every case the area you will note is closely related to its immediate needs in the house.

Styles of Planting

However before considering the actual planning of these ground areas we must take into account the fact that there are two distinct ways of laying out a property. These are the Natural (Informal or English) style and the Formal (Architectural or Italian) style. We will, therefore, consider these briefly and see wherein lies the difference; their good and unsuitable points for the place of moderate dimensions.

The Natural style (see Fig. 3) calls for open lawns, be they large or small and this is the chief of its charms and the basis for all the planting. Other points to be considered when Laying out planting in the natural style are curved lines, trees in properly. groups and the extensive use of shrubs, particularly in aiding to unite the buildings with the grounds and the surrounding landscape. Of special interest in the natural style are these shrubs and their use will be discussed in detail later on. Curved lines should be graceful and natural, not aimlessly meandering or curved just for the sake of putting in a curve where a straight line would be more appropriate. Trees may be used for shade on the lawn and to frame and form a background for the house. Perennials in this style are most effective when grouped in borders or among the shrubbery and are often supplemented with annuals, bulbs, etc., used in the same way.

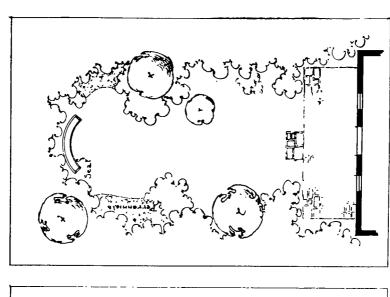
Unless care is used the true character of the natural style can be spoiled or lost by the use of artificial constructions and especially by poor fences and badly cared for plants. By artificial constructions are meant the well intentioned but unsightly assortment of odds and ends placed on the lawn such as the flower box made of an old boiler, tripods of birch

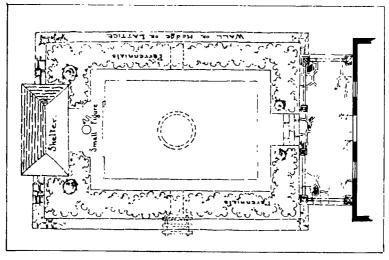
poles holding a tin can suspended filled with flowers and the grotesque edging of beds and paths with whitewashed stones and even inverted bottles or auto tires. We are all familiar with these cheap and puerile attempts at gardening which are crude and should be carefully avoided. Even a well designed vase or urn strikes a discordant note if placed on the lawn in this style. Badly treated plants include not only those that are sheared to even surfaces or to artificial shapes but many of the so called weeping trees top grafted on straight trunks. These have their place but not in a natural land-scape or lawn.

The Formal style, (see Fig. 3) on the other hand, is distinguished by geometrical curves and straight lines accompanied by trees in rows and the trees and shrubs often clipped to give Architectural more formal appearance. Closely mown lawns usually features. definitely bounded in rectangular or circular form and cut by paths are typical. Architectural features and statuary which set on the axes, predominate. Turf or stone terraces and formal water pieces as fountains and pools supplement the architectural features. Sharp color contrasts particularly in the foliage, emphasize the plantings and hedges are much Flowers in clear cut beds and regular arrangement take the place of the free grouping of the perennial border. The formal garden or area is in reality made an integral part of the architecture of the house, through the continuation of its lines, making an outdoor living room as it were. Mere straightness of paths and roads lined with trees, or rows of shrubs or shrubs in pairs alongside a path do not constitute the formal style however. Many stiff and undesirable plantings unfortunately result from an attempt to be geometrical.

These two ideals of planting are so different that they cannot be indiscriminately mixed. Both can, however, be very effectively used on the same lot, even though quite small, provided one is adequately separated and screened from the other. That is, a formal garden may be introduced into grounds laid out in the natural style provided there is a definite demarkation. One can well look from the natural to the formal, provided one sees through a vista or opening and not the entirety of the two styles. Informality within the formal is seldom attempted but can be used if necessary.

As the natural style is more easily mastered and most suitable for the average home conditions, the general remarks and the planting material will apply to this style unless stated otherwise. The flower garden or formal garden, however, will be taken up as a "special topic" in the next chapter.



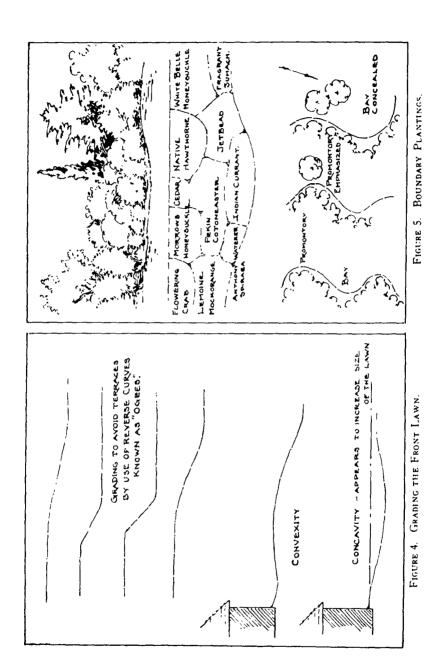


If called for, develop the cross axis and Still maintaining pool (shown in dotted lines).

Service Taken Care of Elsewhere.
Figure 3. The Formal Garden.

THE INFORMAL LAWN.

Still maintaining the strong central axis.



Special Features

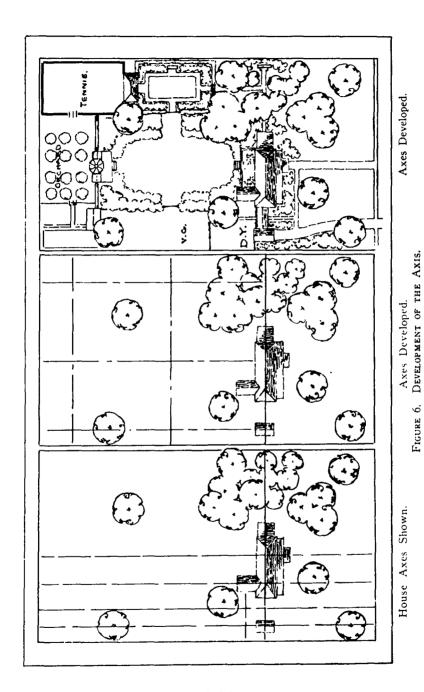
The Open Lawn

A practically unbroken stretch of lawn, whether large or small, is the setting or ground work for the placing of all the trees, shrubs or perennial plantings. Even in the formal garden, Level. panels of grass are used most effectively in some of the For the formal garden level lawns are highly desirable, but it is a great mistake to smooth off and level the lawn for a natural setting. The easy flowing undulations of the average natural slope or levels may well be retained and only the most pronounced changes in level altered. Indeed these are sought and in many cases, undulations are placed strategically to get a certain effect, at great expense. Bumpiness should be avoided, of course, for the sake of upkeep and a happy medium between levelness and nature arrived Terraces, especially of sod, should be avoided where possible, as they are stiff and difficult to keep up. Figure 4 will explain how to avoid terraces when grading. It is impossible to prescribe for all conditions but in the opinion of the writer abrupt changes in level are better taken up by a form of rock garden or a retaining wall. With the latter the first cost may be relatively high but it will reduce the upkeep. Where, however, the changes in level can be related to the house, preferably in parallel lines and can be definitely terminated in walls, fences or even shrubbery, they may be used very pleasantly and to good effect.

The plantings are largely kept to the margins of the lawn and thus add to its apparent size. The possibilities of variation in the general masses of the boundary plantings are diagramatically illustrated in (Figure 5). With a large variety of shrubs and trees to choose from there need be no monotony. These remarks apply to the naturalistic back, side or front lawn and one of these, the front lawn, will be discussed more in detail later on.

The Flower Garden

Where possible the flower garden, usually formal, to show man's dominance over nature, should be placed in the closest relation to, and greatest intimacy with the house and particularly the living room. If a door for exit into the garden is available, so much the better. The flower garden should be considered, in fact, an out-door living room, fully furnished. For this reason it is at its best placed on some axis of the house such as the steps of a stone terrace, verandah steps, dominant window or windows, etc. By axis is meant in direct line (right angles or parallel) with some prominent feature or part of the house. This



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An Iris Walk-Lilacs in Background

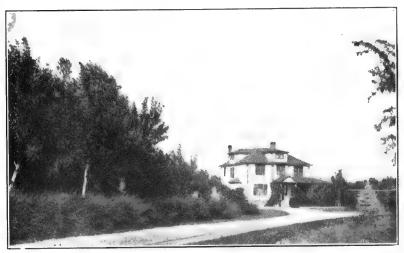
idea of the axis is the preliminary step in garden design and an understanding of the axis is absolutely essential. An explanation may be found in diagram (Figure 6) which should be carefully studied. There are direct and imaginary axes as shown. The direct axis is carried out with paths, while the placing of points of accent such as garden furniture in some definite relation to the house or other parts of the garden may be called imaginary axis.

Another essential of the true garden is complete enclosure and privacy. This may be accomplished by the use of hedges, shrubbery, treillage or vine-covered fences. Such enclosure is one of the attractions, and glories of this type of garden which is a complete unit in itself. Here is where designing can be indulged in freely and a well designed garden is indeed a treat to the eye and the height of the owners ambition. One's fancy can be given free reign along well defined principles of planning but simplicity is advisable especially on the small place. Do not make the mistake of trying to copy in the garden the elaborate design of some large estate you have seen and admired.

The garden area is usually divided into beds by paths of sward, gravel or flagstones and there may or may not be grass panels as very often the entire area is taken up with flower beds. Some central feature is generally used with subordinate features as garden seats at the sides or ends. The central motif may be a sundial, pool or sculptured piece. Where garden buildings are used they are usually placed on axis and one building should predominate on the strongest axis. Where a tea house or pergola is used all the remaining features should be subordinated. The planting in such gardens should be of only the most



Before Planting on the bare Prairie of Alberta



After planting on what was the same piece of bare Prairie.

refined sorts and very often the beds are given over to some special flower such as the Rose. Sometimes different levels may be constructed and interesting details worked out. The design of such gardens is quite a specialized art and the fine points are only acquired after much study. For really first class results the services of a trained Landscape Architect are required. However, by following the diagrams and rules and keeping the essential points in mind the home gardener can evolve a simple garden in quite good taste.

Vistas

What is a Vista? The Dictionary tells us that it is a prospect or view through an avenue or frame of trees. In Landscape Architectures the working out of vistas is one of the most absorbingly interesting features of planning. In the first place a vista may be obtained and made a part of the grounds by looking through a gap or definitely framed opening in the boundary planting. This is one way of enlarging the apparent size of the grounds and adding interest, and in the case of good views it is just as important as the screening of unsightly objects or scenes. Look about your place, however small, and see what can be done along this line even though it may mean sacrificing some of your pet trees or shrubbery.

On large properties or even quite small grounds, the vistas can be carried out quite successfully within the grounds themselves.

looking from one unit to another. In fact it is the logical development of the axis. Thus very fine effects may be obtained through the design of vistas from the lawn to or through the flower garden over to some unit beyond. The reverse view would be from and along the flower garden axis to the naturalistic lawn beyond. Such a vista will usually be obtained through an arched gateway or entirely naturalistic, through the opening in the planting which can very well be emphasized at this point.

Furniture

These appurtenances or aids of the gardener, if properly used, will add immensely to the attractiveness and usefulness of the home grounds. Yet how often one sees them scattered over the lawn with apparently no logical reason for their placing. Under the heading of garden furniture may be classed urns, vases, benches, seats, arches, gates, treillage, etc., and statuary in more elaborate gardens. These are essentially focal points in the garden scheme and so should be strategically placed. By strategic positions is meant the termini (or ends) of paths, under trees, marking the entrance to a path or garden, in the bay of a shrubbery border or on any garden axis.

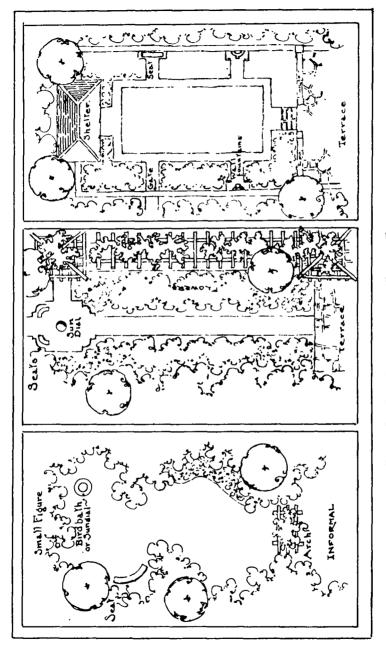


FIGURE 7. THE ARRANGEMENT OF GARDEN FURNITURE.

The garden buildings may be summer or tea houses (closed or open), tool houses, pergolas, temples, etc., and they also should form Building.

focal points or the termini of paths, gardens or vistas. These are usually fair sized structures and their size in proportion to the garden is most important as they can be easily made to dwarf their surroundings. Vines on such structures add greatly to their appearance but at no time should they be allowed to completely cover the surface. They should enhance the beauty of the structure but not obliterate its main architectural lines.

The use of tub plants is closely akin to the placing of garden furniture and is worth mentioning here. Tub plants should not be placed in the middle of the lawn any more than garden furniture. Their place is along a garden path, to make an entrance to the garden, on a flagstone terrace or marking verandah or terrace steps. On large places they may be used in the formal garden and court yard or service turn and are often grouped to obtain a foliage effect which would not be otherwise possible.

Pools

Pools are closely allied to Garden Furniture and whether formal or natural are an unending source of delight. There is a fascination about still or active water in a garden which can be obtained in no other way. Space will not permit a detailed description of the building of a pool and the reader is referred to the many articles appearing in current garden magazines and other publications. Sufficient to say that the pool should be considered very much like the garden furniture as a focal point, strategically placed on some form of axis and not dug in a haphazard position, anywhere on the open lawn.

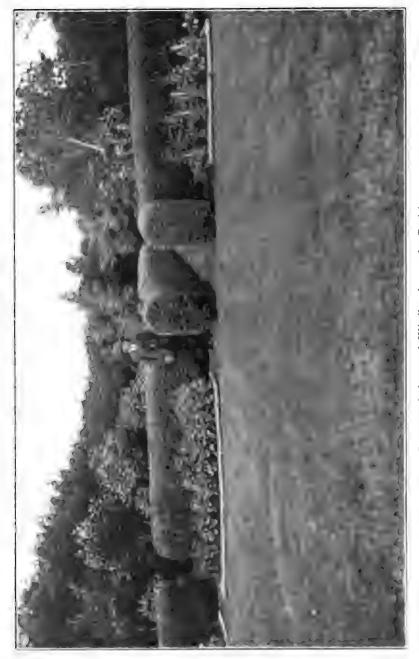
On a strictly naturalistic lawn however, with no definite openings or definite relation to buildings this rule is not so important.

Considerable latitude may be allowed in freedom of placing the pool but it is advisable to keep it towards the margins and possibly somewhat sequestered in a bay of the shrubbery planting. This applies particularly to the truly naturalistic pool. Very often a natural opportunity presents itself, such as a small stream to dam and then it is a question of true relation to the rest of the grounds and here the axis will help as a

guide.

Hedges

This form of planting deserves special mention as it is possibly the most abused and most difficult of garden plantings. A hedge is essentially a fence or definite enclosing barrier and care should be used in its placing. It should begin and end definitely in connecting two strategic points. Too often the hedge commences at the house or fence line and ends abruptly somewhere on the lawn, apparently with no particular reason. One good test is that one should not be able to pass around the end of a hedge freely.



Caragana hedges and Windbreaks on the Prairie

The best use of a hedge is to enclose the definite area known as the flower garden which is usually of formal design. Here it has the distinct advantage of conserving space and providing a most desirable, natural green background for the flowers. As a barrier along the front of the property or sides instead of a fence hedges are much used but require careful placing and upkeep.

Hedges, whether evergreen or deciduous, may be clipped or left to grow naturally, depending on the requirements of the situation.

Upkeep. The deciduous are the most easily handled and replaced in case of damage and are recommended for the beginner. Unless all year-round dense screening is essential they are quite satisfactory. The evergreen hedges require more care in establishing and upkeep and unless one is prepared to give them this extra attention the deciduous hedges are preferable.

Free growing hedges may be used on the boundaries and where there is plenty of room and height is required may very well be of flowering shrubs. Japanese Barberry and Privet on account of their regular form very often prove quite formal enough without shearing, especially if clipped just sufficiently to keep the longer

shoots within bounds.



"Attractive though too close planting of street trees-American Elm"

Street Trees

The blight of poor street trees, especially in our large cities is steadily growing worse and great care must be exercised in making such plantings. There are several rules to follow if one is to be successful and these are:

1. Try for uniformity in the street and conform to the practice on your particular street. If there is a central town or city authority, consult him as to what to plant, and the distances apart, rather than plant independently on or in front of your own lot. This form of planting should be the work of the city. Especially avoid close planting. Authorities agree that 40 feet should be the minimum for such trees as the maple, and fifty feet for the elm. Trees at these distances make a beautiful street and do not, when mature, overshade lawns, shrubs and flower beds.

2. Plant carefully as described under the planting of trees, and give extra attention to the preparation and fertilization of the soil. Trees in parking spaces and side walks are particularly dependent on this preparation for a good start.

3. Protection is absolutely essential, as the small boy cannot resist the temptation of swinging on the newly planted tree. Cars and animals are bound to injure the bark and even the lawn-mower may accidentally damage the tree and all will retard its growth, besides proving unsightly. Unless the wounds are treated the tree is very often killed by the entry of decayed fungi and final rotting of the wood. Of course staking is absolutely essential and will help but the provision of a boxing as well of iron or wood will ensure success.



An Avenue of Norway Maples

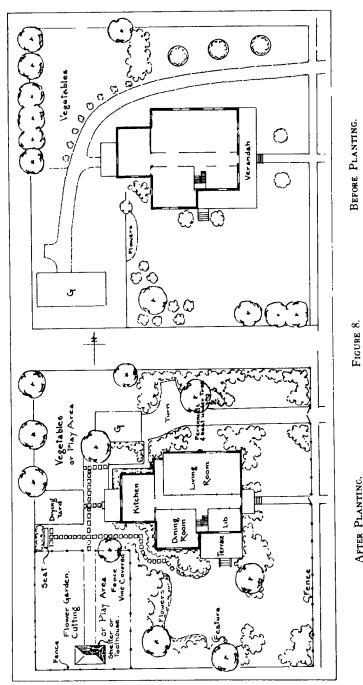
- 4. Watering the newly planted trees in dry weather is very essential as they are subject to a limited supply of moisture. Sprinkling will prove inadequate and a good soaking at intervals is best so that the water will soak well into the ground where it is needed. For this reason it is advisable to mound up, about 4-6 inches, a large circle about the trunk extending to the circumference of the roots. This can be filled with water until one is satisfied that a thorough amount has penertated to the roots.
- 5. Street trees, to allow for the average traffic, must be pruned quite high. Nine feet at least to the lowest branch is none too high. Quite frequently as the trees become old, they should be carefully pruned out of the way of traffic.

Before and After Planting a Square Lot

Figure 8 is a very obvious "Before and After" treatment of an almost square lot. The design on the right shows the property as found by the writer and its worst points are as follows. (1) The Ugly Road.—It starts at one side of the lot and crosses to the other side at the back. This arrangement is not only wasteful of space but the road also curves in an unpleasant way too close to the building which develops an awkward relation to it in that it leaves awkwardly irregular areas between the road and the lines of the house. (2) The Garage (formerly a barn) is wasteful of space and the garage turn is inadequate. (3) The house foundation is entirely bare and the plantings are inadequate and badly disposed. Nearly all the shrubs are specimen plants and to make matters worse are set in pairs. (4) The three round beds in a row on the strip of lawn to the right of the house are the worst form of flower display and besides being badly placed in relation to the living quarters of the house are in very poor taste. The flower border on the larger lawn (the logical place for a broad display) is entirely inadequate. (5) The trees are badly disposed and do not frame the house although those at the back help form a background.

A general criticism is that the whole place is too open with practically no privacy or division of units, while the plantings where they exist are too crowded.

Among the improvements made in the design on the left are: (1) The clothing of the base of the house and the elimination of the too emphatic shrub pairs although those off the side verandah (now a terrace) could very well be left and supplemented. (2) The garage has been properly placed in relation to the service area and the large section it formerly cluttered up has been developed into a flower garden or play area to suit the needs of the household. (3) A definite drying yard has been placed in close relation to the kitchen though well hidden. (4) An interesting development of axees and connecting links has been carried out among the units at the rear.



AFTER PLANTING.

(5) The trees have been disposed to partially frame the dwelling and form an adequate background. The flower borders also are now adequate to produce the needed color on the living lawn. This main lawn has been given a much needed privacy by shrubbery plantings. (6) The house has been altered somewhat and much useless verandah removed which pulls the front back from the street. Instead of the side verandah a broader, more usable and more pleasing terrace has been developed.

The Small Front Lawn

"Happily, like chess, the gardening game is one that can be played, and played well, too, with little pieces on a tiny board."

-- Mrs. Bardswell.

Of all design problems, this is possibly the most difficult one in which to achieve individuality and charm owing to the confined space in which one must work.

The general principles of landscape architecture as found elsewhere in the booklet will apply just as well to such areas only one must be even more careful as one is dealing with the most seen part of the home lot and the setting for the dwelling. Particularly must one watch for a strict adherence to one or the other of the principal styles, formal and informal.

The first important point is a good lawn as a basis for either style where the topography is suitable. Such a pocket handkerchief size should be carefully graded, well mown and absolutely free of weeds. Where the topography is so irregular or rocky that one cannot establish a good lawn, the home owner should adapt the treatment to the site and make the most of the natural site, thereby attaining individuality. By no means attempt to conform to general practice and attempt to level the ground. This type of front yard, however, is too varied to consider adequately in this article and can only be touched upon in passing.

The second point is the choice of style. There are three principle styles to choose from in designing the small front lawn and this choice should be largely based on the architecture of the house. An irregular rambling type of house will call for informality while the balanced front will call for the opposite.

Briefly the styles are: (1) For the balanced house particularly with windows either side of a central door, some interpretation of the formal style consistently carried out, along clearly defined axes, as to balance of masses even though some of the shrub masses may be somewhat informal. Gay beds of flowers along the foundation, borders and axes are in keeping. Urns, vases and window boxes of formal type will play an important part in such a scheme, used in axial relation.

The garden gate, either in a hedge or fence, can be made an important adjunct. Vines may be used with trellis work and this trellis made an important focal point on the house. In fact in this style, vines may be used to give what is known as a flat treatment, in which practically no shrubs are planted and the vines are depended upon to supply the greenery.

- 2. The irregular or even rambling type of house is best treated in an informal manner. This calls for irregular masses of shrubbery along the boundaries and foundation of the house keeping the lawn of course, open. Window boxes of informal plantings may be used but vases, tubs, etc., should be subordinated and used close to the house, preferably on the steps or terrace only. Lattice work with vines is also suitable but in this case the lattice should be largely vine covered so that it is subordinated and not made the focal point of the formal style. Gay flower masses should be confined to naturalistic borders consistent with the informality.
- 3. The low cottage type of home or bungalow lends itself to the so called "English cottage garden" type of treatment although the rambling house previously mentioned is nearly equally suitable.

This type of treatment is growing in favour and depends for its charm on a house front comparatively tight to the street, as it was developed under just such conditions. It is somewhat formal as to the design of the paths and beds but strictly informal as to the plantings within the often irregular shaped beds. Usually such a front yard is developed behind a picket fence or a hedge and is a riot of color. Due regard must be paid to axes and focal points if satisfactory results are to be obtained but otherwise one has a free rein in the arrangement of the various beds where balance is not so necessary.

The choice of styles brings out the third point of importance, namely, conformity to the prevailing type of treatment found on the street or at least within the block. A much more pleas-Style. ing and unified effect is obtained where neighbors unite to treat the street uniformly and where no very decided changes are to be found. That is, all will adhere to some form of open lawn with a definite setback for trees, shrubbery along the boundaries, etc., as in the informal style or on the other hand to a formal treatment with hedges or fences and planting in beds. Within this general conformity of course are endless possibilities for variety in materials and design and the effect need never be monotonous. Slight departures from the general rule will result in individuality to the street and add variety. Too great a change will upset the general harmony such as a single property in a block fenced prominently while all the others are open to the street. This may seem at first too much a hardship on those who desire privacy. Privacy, however, can almost always be obtained in the rear and it should not be asking too much of the home owner to co-operate in the general beauty of the street. Of course if everyone desires privacy the problem is quite easily solved, but, even an open front may prove a blessing in disguise by having the more desirable private area in the rear of the house.

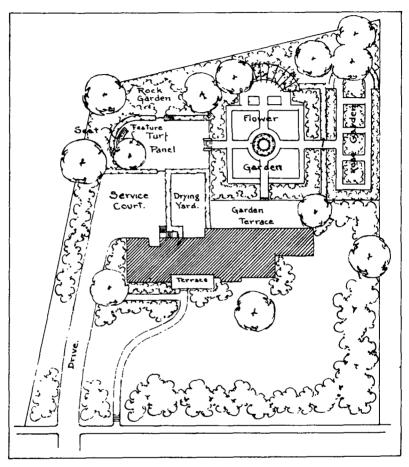


FIGURE 9. THE DEVELOPMENT OF THE LARGER LOT.

The fourth consideration and in many ways the most important is that of scale. That is the size of paths, walks, garden furniture and particularly plant materials in relation to the total area available and the dwelling. This relative scale (making everything fit the small area) calls for the smaller shrubs principally. The best of these for such use are; most of the spireas, the barberries, Symphoricarpus Cotoneaster horizontalis, Hydrangea arborescens and the smaller growing evergreens. Many of the lar-

ger shrubs which are slow growing or will stand heavy pruning may be used if kept within the proper size though in few cases should they be clipped.

On the tiniest of front lawns, window boxes, tubs and vines, in tubs if necessary, must be resorted to for effect and much can be done with them. Even the potted plant is not to be despised and it can be used to add a touch of green and brighter color.

In many cases, the front yard cannot be treated with grass at all and some form of gravel, paving or flagging must be used. Here the treatment must be very simple and the greenery of plant materials largely subordinated to variety in the materials of the architectural treatment.

For an interesting study of front and back yards and even areaways consult "Gardens for Town and Suburb" by V. N. Solly, published by the Encyclopedia Britannica, Inc., London.

The City Lot

Figure 10 shows two possibilities for developing the city lot when the house takes up nearly the entire width of the lot. The plan on the left shows a somewhat more formal design to suit the broader terrace in the rear (which seems to suggest a broad lawn) and the floor plan of the home which places the kitchen and the drying yard directly on the street, necessitating complete screening of the latter.

In each case notice that the walk on the left of the house has been emphasized and made an interesting feature as it is the longest axial development possible on the lot.

Study the relation of the various units of the design to each other and to the different rooms. This relation is the important factor which governs the design rather than exactly what is done with each part of the lot. If the home owner sticks to the proper relations of his plan and decides just how much room he personally requires in each, the design will develop logically, and then the entrances and exits or connecting links between these units may be developed and adorned with garden furniture to add beauty and emphasize axial relations. The skeleton must be worked out, however, in unit relationships.

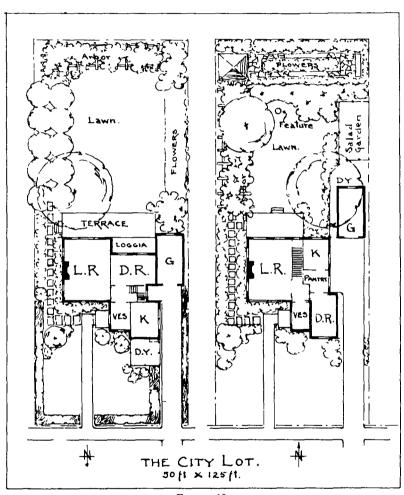
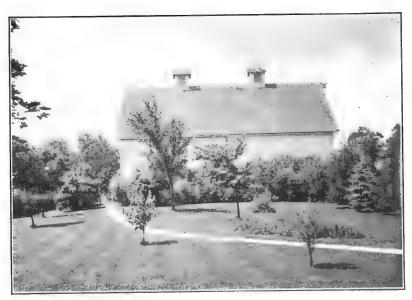


FIGURE 10.



Looking toward the barn from the house. The barn should be screened as suggested here.

Planting the Farm Home Grounds

HE farm home is unique in that it is not only the family habitation but also the business front of the farm. Therefore, it deserves special consideration by way of landscape architectural treatment. In many ways, good design of the farm home grounds is the same as for the suburban home, treated previously, and this chapter may be consulted and modified for the particular needs. In certain respects they differ greatly and I purpose enumerating four principal differences.

In the first place, the farmstead proper is divided into two groups, (a) the barn group consisting of the farm buildings, arranged about the barnyard in the form of a court or with barnyard attached to the buildings and (b) the home group consisting of the dwelling and grounds.

These two must be treated as one unit in design and their undesirable features screened while yet joined by the plantings.

Secondly, on no account should formality intrude on the natural setting of the countryside except within an enclosure. All planting should be considered as harmonizing the grounds with their surroundings, the natural countryside.

Thirdly, the proper arrangement of drives is important and it is desirable to have one entrance with a subsidiary service drive leading to the barn and away from the house. If this arrangement includes a loop for a turn-around at a combined point for visitors and service it will prove still more convenient.

Fourthly, a small secluded lawn, flower bordered and preferably accessible from the livingroom, is a great asset.

Figure 11 presents a farm design that will illustrate the various points just mentioned.

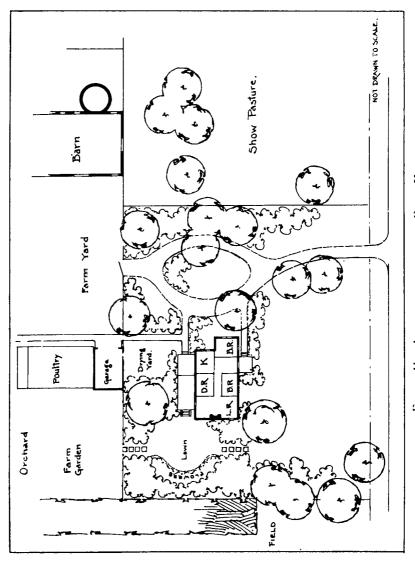


FIGURE 11. ARRANGEMENT ABOUT A FARM HOUSE

In the first place notice the two groups. The house group and farmyard group, the latter screened from the former.

An important point in the farmyard group is the arrangement of the buildings about a convenient courtyard which allows

Neat
courtyard.

Neat
courtyard should be
kept neat and free from obstructions except such
machinery as may be in actual use. All other machinery should be stored in its proper place in sheds convenient to
the road and to the fields.

The garage in this plan is placed in a convenient corner of the courtyard but can be placed nearer the house in the house area if desired as in the other illustration.

Notice the convenience of the poultry house and run and the vegetable garden, or small fruits.

A principal feature of the house group is first the utilitarian turn around drive which allows of turning without entering the farmyard and also allows convenient access to the farmyard without going near the house.

The second important point is also utilitarian, the convenient arrangement of walks to the house from the private road. A small entry porch has been used to replace the conventional verandah and the back verandah has been developed as an outdoor living and dining room with convenient access to an intimate small garden. This small garden has been screened from the highway by shrubbery plantings and also from the service area of the house where clothes may be dried. This service area is conveniently located off the kitchen porch.

Notice the limited though adequate lawn area in front of the house with its groups of trees arranged to frame it and provide a green background. Note also that while trees screen the barn they do not altogether conceal it so that a watchful eye can be kept on all buildings from the house windows. The shrubbery may be kept low in certain directions for this reason also.

Finally there is the windbreak on the north and west which is desirable in most localities. On the prairies it is an absolute essential and must be specially planted. Under almost all circumstances it is well worth while and it adds a touch of snugness to the appearance of the farmstead besides protecting humans and stock from the biting winter winds.

Rock Gardens

Rock gardens are the most adaptable of garden features and can be placed in almost any part of the grounds, provided reasonable

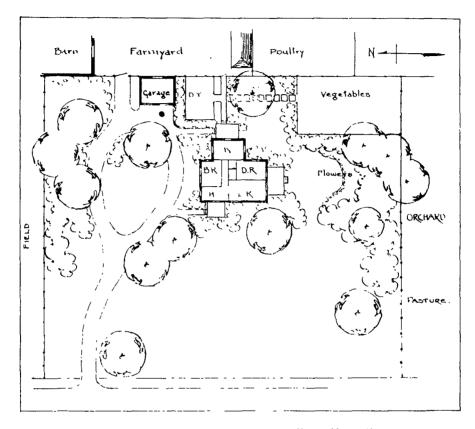


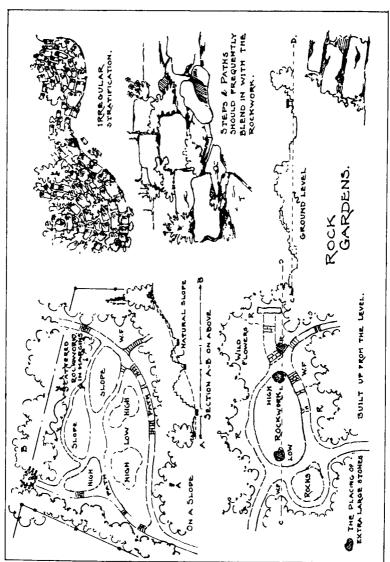
FIGURE 12. Another Arrangement of the Farm Home Grounds.

seclusion can be secured and they are kept away from buildings and formality of all kinds. This is speaking of the true rock garden and not rockwork of various kinds in odd corners which serves an excellent purpose in beautifying its situation but which can hardly qualify as a rock garden.

As the chief consideration is drainage any slope is to be welcomed such as a mound, a hollow or a steep bank. A trickle of water or a brook, a stony waste space in the garden area or an outcrop in the woodland all suggest a rock garden treatment. All these are nature's suggestions but even on flat ground very satisfactory results can be produced with a second type known as the sunken path rock garden. This is accomplished by digging out an irregularly curving trench and throwing the soil up on both sides or one side only. Planted with shrubs



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to accentuate its height and to give seclusion it becomes a naturalistic dell of great beauty. The bottom of the trench becomes the path of course, and this should wind and change level as much as possible to add interest. (See Figure 13).

This is the most important part in the entire building of the rock garden. If the natural site does not provide for it, a six inch layer of drainage eighteen inches below the surface, will prove sufficient depending on the site, except where it is very stagnant. Such a hollow will most likely require drainage with agricultural tile. This drainage will consist of rubble, broken brick, large gravel or similar materials.

Build up the rocks from the lower side to the top. Set each rock firmly, making sure that pockets or ledges are formed but avoid regular tiers. These pockets and ledges prevent washing and also provide soil spaces for different mixtures outside the regular soil requirements, for special groups of plants such as those requiring acid or peaty soils.

Use care not to space the rocks too evenly and endeavor to imitate a natural outcropping or stratification where possible with the rocks set at a natural angle. This is especially necessary if the garden is built on level ground. Where only rounded and small boulders can be obtained they may be grouped and so arranged as to seem like a natural outcrop rather than scattered about at regular intervals to give a restless, spotty effect as is so often seen.

The number and importance of the paths will depend on the size of the garden. Enough are required to give easy access to all parts.

Planning the garden paths.

These should not stand out plainly as paths everywhere but should blend in with the general rock work at times. Flag stepping stones here and flat rocks of the main rockwork, designed so that the path curves and wanders in and out is more charming. Plants may be placed in the crevices of these walks.

Interest along the path is considerably greater if all of its length is not exposed to view at once. Some of the smaller shrubs and evergreens may very well be used at a turn to further screen the view.

Water in any form adds tremendously to the beauty and interest of the rock garden. It may be a tiny trickle of water or a small pool. A narrow, irregular, somewhat kidney shape is an excellent form which gives the greatest effect for the water used.

Pools are usually lined with cement and strongly made and if large enough and with a depth of 18 to 25 inches, may be used for growing water lilies. Half barrels make an excellent substitute in the very small rock garden and if arranged at different levels so that they spill from one to the other by connections the effect is delightful. The important point is the careful concealment of the rims by a naturalistic coping of stones.

In the lists at the end of this booklet will be found many



Compay Vingas Specie



A well placed group of American Elm

what to plant. The autumn crocus will supply similar color in the fall.

Somewhat we plant for rock garden work and they are so marked. A year round effect is desirable and this may be accomplished by the use of early flowering bulbs such as the tulip species, crocus, grape hyacinth and glory of the snow.

The general creeping class of perennials is most suitable such as Sempervivum arachnoideum, Polemonium reptans, Creeping Phlox, Sedums, Thymus, Saxifrages, Iberis sempervirens, etc. The spreading annuals, such as the Sweet Alyssum will do very well to fill in gaps and supplement these.

Many shrubs and trees are suitable particularly the more prostrate forms as Juniperus horizontalis or the more trailing variety tamariscifolia. Very dwarf forms of spruce may be found in nurserymen's lists but be sure they are dwarf when purchased.

The prostrate Cotoneaster, C. horizontalis where hardy, and similar shrubs are excellent subjects for this purpose.

The main flower planting will depend largely on the type of garden and the care to be given it as well as size. Many will be content with the creeping plants only, which will largely take care of themselves while others will use also other classes of plants of more upright habit.

In general, it is advisable, although not essential, to plant as the rock work is built up and this gives the greatest opportunity for setting the roots well into the crevices which will be repaid by better growth. Supplementary planting, especially of smaller things, may be done at the regular planting season or during a reconstruction of some parts of the garden. This reconstruction work, with a renewal of the soil, must be carried on every two or three years to keep everything in first class shape.

Plant Materials and Their Use

The Painter, working on his canvas to perpetuate some fine landscape, may be likened to the Landscape Architect who, however, uses natures own materials to compose his picture. This picture is worked out on the canvas of natural topography or graded lawn.

The fact that the Landscape Architect works with living materials is at once an advantage and a disadvantage. It is an advantage in that through their use he is able to create a composition and also work in what is known as the third dimension, depth, which means that his composition will be seen from many angles instead of the one set by the painting. Its disadvantage is that, while the painter works for a time and produces his masterpiece completed, the Landscape Architect must wait many years for his composition to reach maturity. The picture formed in his mind at the time of designing, must be carried out in small size nursery stock usually, with a limited amount of larger size material.

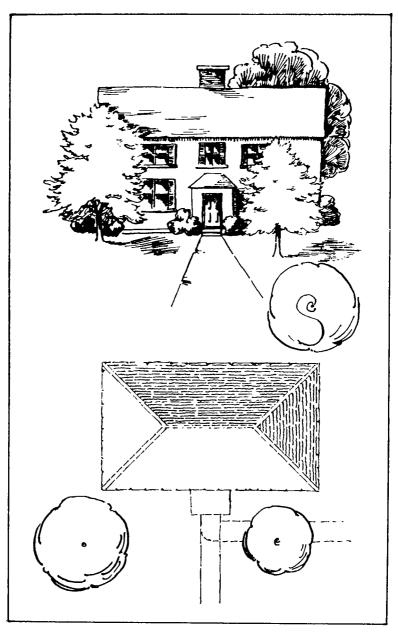


FIGURE 14. THE PLACING OF PRINCIPAL TREES ABOUT THE HOUSE.

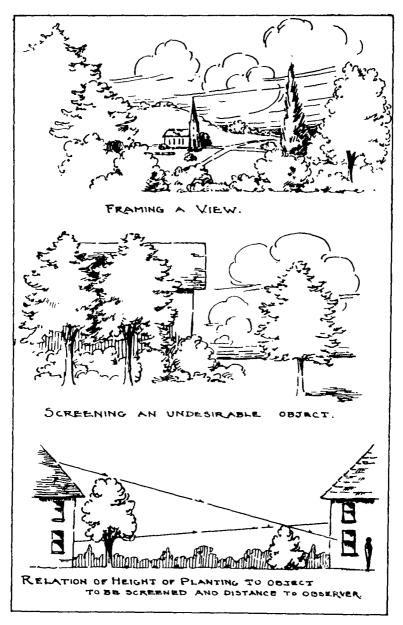
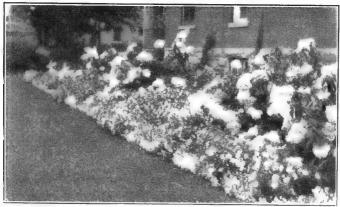


FIGURE 15. ENFRAMING AND SCREENING.



Snowball Hydrangea

The following notes then, are intended to help in the design of the landscape picture, considering the principal elements, trees, shrubs and herbaceous perennials.

In considering the painting of our landscape picture, the trees about the property form the frame work of the composition. There **Arrangement** are three principal uses for them at places about the grounds where they may be planted to look well.

- 1. To form a background for the house or any buildings.
- 2. To frame the building or buildings.
- 3. In groups on the lawn or margins for shade, to frame views or obscure undesirable objects.

The larger the home grounds, of course, the more room will there be for indulging in these three uses of trees. Even with a limited space, much can be done especially with a wise choice of trees. Figure 14 will aid in the understanding of the placing of trees.



Pleasing Foundation Planting

Such trees, well placed, add greatly to the appearance and attractiveness of the home giving it stability and a "homey look". Figure 15 will help you to visualize the arrangement of Space. groups with the idea of enframing or obscuring views. These remarks are of necessity very general and brief, yet the prin-

ciple set forth may readily be applied, to actual individual problems.

Shrubs supplement and enhance the tree planting. Even though the home grounds may be plentifully supplied with trees they will still look bare and lack in finish and Arrangement of shrubs. completeness. Shrubs are planted to:

Tie the house in with the grounds (foundation or base 1.

plantings).

As boundary plantings, to screen unsightly objects, divide the various areas or secure natural privacy for a given area.

To provide large masses of flower color at the different seasons and for the winter effect of twigs or berries.

As individuals or specimens to accent points, because of some striking feature such as flowers or beauty of foliage. These latter, however, should be used sparingly as a spotty effect will result.



Pleasing arrangement showing Shrub Screen between house and service road (Hydrangea arborescens grandiflora)

These often are the most noticeably lacking of all uses and this form of arrangement will be considered in detail. They are also very often poorly done, either monotonous Foundation plantings. and inadequate or they quite hide the building.

An irregular planting is advisable for most situations unless the grounds immediately about the building are to be laid out formally. Variety is the keynote of individuality and suitableness. first for variety in the height to avoid any resemblance to a hedge about the building. Variety in width is also essential for a similar reason. The lower growing bushes may be placed below the windows

and along the sides of the building but the height should be increased at varying intervals and in most cases more particularly at the corners and doorways. In general the three chief objects of a foundation planting are:

- 1. To tie the house to the ground upon which it rests and to nearby plantings which will make it fit into its surroundings.
- 2. To add to the architectural beauty of the house by an adequate planting which will offer a pleasing contrast to the lines and the color of the house with the idea of softening the appearance of the base of the structure as a whole.
- 3. To conceal the lines of the foundation or minimize its height.

The smaller the property, the more important relatively are these three points. On small properties the house is usually high in relation to the ground space which it occupies; there is less architectural interest in the foundation and it is usually placed much closer to the passerby. Also on the relatively small lot there is not the advantage of a large mass of other dense shrubbery plantings on the remainder of the property.

Fundamentally desirable effects in a foundation planting are:

- 1. Grace of outline.
- 2. Individual points of interest.
- 3. Adequate provision of cover for the foundation.

To obtain a graceful outline use plants which are in themselves graceful in form and which will give a soft and pleasing appearance to the entire mass of the foliage. By making some portions of the planting heavier than others and by varying the height as suggested previously, the outside of the mass will grow irregular in character and the planting will then tend to soften the straight architectural lines of the foundation.

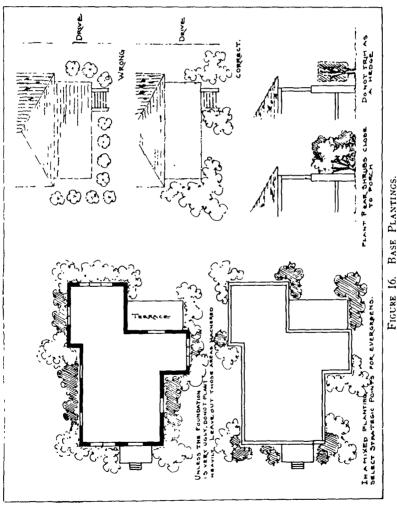
For individual points of interest select plants that exhibit a variation in color and texture of the leaves and which present an interesting play of light and shadow. The judicious introduction of profusely flowering shrubbery and some berry-bearing specimens will add additional interest.

To be sure of an adequate cover for the foundation select those plants that have a fairly spreading habit and supplement them by a facing or cover planting of the smaller low headed shrubs at the openings. These hide the base of the larger shrubs.

The foundation planting should also vary in width but not too irregularly. There is a happy medium secured by making natural graceful curves and not snake-like twistings. Bringing the width well out from the corners is a general practice which emphasizes the plantings at strategic points. Monotony should be avoided at all times in the height, width and the planting material used. The grouping of the varieties of shrubs

will, however, counteract an opposite tendency to spottiness which would result if too much variation in height and plants chosen, were used. Three important points are these:

- All the foundation should not be hidden unless it be very ugly. Usually cement foundations are unsightly, bare, and better largely hidden. Just how much to hide will depend on the type of architecture, regularity or irregularity of the building, and its attractiveness as well as that of the foundation.
- 2. As one is not planting a hedge about the place, care should be taken to avoid straight lines whether single or double.



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Pyramidal Arbor-vitae. White Pine in Background

Preferably the shrubs should be spaced irregularly. Figure 16 will show how to plant and the errors to be avoided.

3. Care should be taken to avoid blocking necessary cellar windows and the basement windows of public buildings. Where the windows are numerous shrubs must be selected with great care and a minimum number of varieties used.

A few perennials are sometimes used along the front to brighten the planting although the practice is not recommended as cultivation is made more difficult. For rather formal situations the Funkias, Hemerocallis, Yucca, etc. are used as they produce a decided contrast.

Any of the lower growing perennials preferably of loose habit, will look very well and may be grouped or used occasionally as single specimens. Peonies are very often used and will do moder-

ately well but will not reach the same perfection of growth and flowering as when grown in the open.

A judicious use of evergreens is desirable for winter effect especially, and for accent points. It must be remembered in mixing deciduous and evergreen plants, that evergreens will suffer from the encroachment of the deciduous which must be continually cut away to avoid damaging the evergreens.

Exclusive evergreen plantings are popular and if well done are decidedly attractive. They are, however, open to the objection of possible monotony, aggravated by the lack of change from season to season. There are so many distinct forms also that care should be taken to avoid "spottiness" resulting from the planting of precisely set pyramidal and globe shapes, relieved by a few specimens of the various low, spreading sorts. Such a planting takes on too much of the character of a plant museum or curiosity shop.

In the writer's opinion a judicious use of both deciduous and evergreen materials is most pleasing for a base or foundation planting with possibly the evergreens predominating. Along the boundaries, in the formal garden and formal areas, plantings may be exclusively of evergreens.

When it is proposed to plant evergreens on a small lawn, or near the house, the ultimate spread of each variety should be taken into consideration as often evergreens are planted Variety. which will eventually take up far too much room and will either have to be mutilated or destroyed later on. Evergreens forming foundation planting should be low growing species or varieties except when pyramidal specimens are used. Broad leaved evergreens (Rhododendrons, Azaleas, Hollies and Kalmias) are the acme of perfection for refined planting which are so desirable in close relation to the house. Unfortunately between climatic conditions and a limestone soil these do not grow readily in Canada except in British Columbia (see lists at end of booklet). The writer has seen numerous attempts to grow these acid loving plants on the limestone soils of Ontario but to his knowledge none have been more than partially successful.

Shrubbery Borders and Screen Plantings

A continuous or nearly continuous planting of shrubs on the edge of a lawn forms a border. In some cases this may extend around three or all sides of a lawn and completely enclose it. Shrubbery borders form excellent backgrounds for perennial borders and on the small place an ideal combination. In certain cases a perennial border may be used at the back and shrubs along one side



The Poplar Soon makes a Windbreak or Screen

only usually the boundary, especially where side and front lawn are open all the way through. Shrub borders are used also for boundary plantings between lots and for screening along the public road to give privacy. By consulting the various plans and illustrations those points can be more readily understood. Figure 16 should be studied particularly.



Herbaceous Perennials as Related to the Landscape

This class of flowering plants, which lives over a period of years though dying to the ground each fall, is the gardeners standby for yielding continuous bloom and a riot of color to the landscape. They are decidedly mobile which is a great advantage, that is, they can be moved with reasonable frequency and thus allow various effects and color schemes to be indulged in from year to year.

The value of the green border is well known and there, in mass arrangement, they are really seen at their best. The perennial border, moreover, meets the average needs most easily and is the most used form of display.

Other ways of planting them may be used, as for example, to a limited extent among shrubbery naturalized or in rock gardens and in beds in the formal garden. This latter point will be taken up more fully in a discussion of flower gardens.

A well stocked perennial border can be made one of the most interesting and colorful plantings of the home grounds. With a wise selection from a very large assortment of colorings and consideration for season of bloom, the gardener can have a delightful succession of interest and a bright display practically throughout the season. As a general rule, for most situations, borders should be kept to the boundaries of the lawn, usually at the sides and back. A background to display the flowers is preferable though not absolutely essential. This background may be of trees, even some distance away, shrubs or possibly a wall or fence on which climbing vines have been trained. In a great many cases the taller growing perennials will serve this purpose quite well.

The width of the border will depend very largely on the size of the property and the particular area which it borders. From six or eight to ten or fifteen feet makes a fair range of widths and the length can extend to any distance, limited only by the extent of the property and the owners ability to give it proper attention. Ordinarily, except in strictly formal situations or very small areas, the front of the border should be cut in irregularly waving free flowing curves. When a border is made alongside a drive or walk, however, it should follow the lines of the road or path, whether curved or straight.

Color, season and height of plant, all play an important part in any arrangement. Color will very largely take care of itself for a start and as one becomes more experienced, correc-General tions can be made and even color schemes may be inarrangement. dulged in. Seasonal effects and a continuous succession of bloom are most important and this should be constantly kept in mind. The question of height is a most important subject and one on which a great deal can be said specifically and I propose to consider height arrangements in detail. As a class, perennials may be divided as to height into low, medium, and tall plants. All these heights, however, vary considerably within this classification. This forms a basis for our arrangement, keeping in mind as mentioned the question of season and color at all times. As to the actual arrangement of the plants, let us consider borders with and without backgrounds, as there is considerable difference in arrangement between the two.

Border with a Background

Briefly the arrangement follows in this order. The tallest perennials will be planted, of necessity, at the back; the low growing plants in front; while the medium ones should be distributed all through the middle ground. If this rule were too rigidly followed, a banked effect would result which is exactly what one should avoid. To obviate this, the medium growing plants should also be planted well towards the front and the tallest of these should be planted well towards the back. This will break up any possibility of a roof like slope and regularity and add the desired variety in height.

Border without a Background

Here the problem is somewhat different as the border may be seen from both sides and therefore the tallest perennials will be placed down the centre with the desired varying slope to either side. Care should be taken to avoid arranging the taller perennials like a spinal column down the variety as possible. If the border is to be viewed more from one side than the other a modification of this idea may be used and the tallest plants placed so that there is not too abrupt an edging on the less seen side.

For all borders good sized groups of the varieties are recommended rather than too "spotty" a planting which is bound to result from the use of many single plants or small groups. A few single plants among the clump groups may be used, however, to good effect and will add variety. Each variety and the different colors should be well distributed throughout the entire length of the border so that bloom will be found everywhere throughout the season. Fairly large clumps should measure about three by two feet.



Herbaccous Border backed by Cedar Hedge at Mimico, Ont.



Herbaceous Border, Lake Simcoe, Ont.

A nearly endless number of color combinations may be tried and color schemes worked out to one's heart's content. Space will not permit more than a passing reference to this intensely interesting phase of gardening. As for the Legiment, there is very little danger of any trouble with colors clash-

ing and should this occur it need not be endured for more than the one season. Perennials can be readily dug up and transplanted so that little difficulty in alterations will be experienced.

Hardy bulbs and annuals should be used to supplement the perennial plantings and provide bloom in early spring and midsummer when it would be otherwise rather lacking. Many of the annuals and bulbs are too stiff and lacking in the natural grace which would fit them for the informality of the border. The following list is recommended as being most desirable for this purpose.

Annuals: Antirrhinum, (Snapdragon)

Eschscholtzia, (Calif. Poppy)

Mignonette, Nicotiana, (Nicotine)

Petunia,

Phlox Drummondii,

Salpiglossis, Marigolds, Lupinus, (Lupine)

Delphiniums,

Dimorphotheca, (African Daisy) Calendula,

Verbena.

Zinnia (Slightly formal)

Gaillardia,

Gypsophila, (Baby's Breath) Linum, (Flax) Forget-me-not.

Scabiosa

Bulbs: Tulips (All but the doubles).

Narcissi—(The doubles are less graceful).

Crocus. Chionodoxa. Snowdrop, Grape Hyacinth, Scillas or Squills.

In the general garden scheme, annuals are used chiefly in a supplementary way, that is, they fill in gaps in the permanent planting and add color at certain seasons when it is very Annuals. difficult to provide color with all the other planting materials. They also have other very definite uses. First, they are useful for giving seasonal effects. Excellent effects may be obtained in the back yard with annual plants and climbers and they have the added advantage of being inexpensive and easily grown. Many a rubbish heap back yard has been converted into a bower of flowers with annuals and an interest in more permanent planting awakened thereby. (Figure 17 will illustrate this point.)

Summer homes especially, may be brightened by the use of annuals. Even the smallest place can be improved with verandah or window boxes and it is here that annuals are possibly Effective at their best. Many other uses may be suggested place. chiefly in the supplementary field, however, such as for cut flowers placed in separate beds and on the larger places they may be used entirely in the formal garden. Annual borders planted like perennial borders are particularly effective and far superior to the so called practice of bedding out Bedding out is too stiff and formal for the average small place besides requiring more care than it deserves.

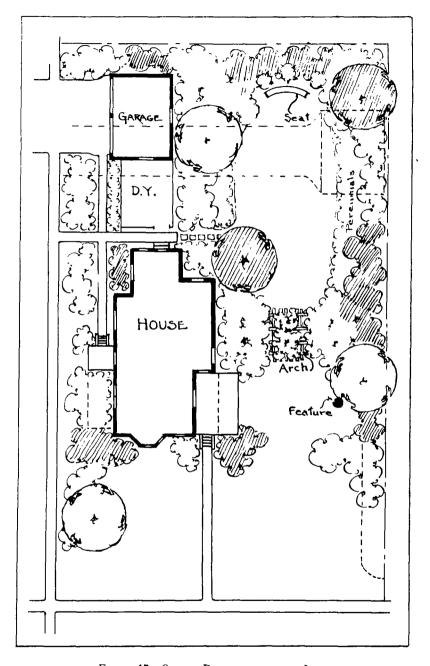


FIGURE 17. SIMPLE DEVELOPMENT OF A LOT.

This is a very simple development of the lot about an old fashioned house. Ample lawn space has been provided as a setting for the house with a little extra privacy for the overlooking lawn off the verandah. To add to the interest of this latter lawn a feature (statuary, bird bath, etc.), has been placed on the central axis of the verandah. This axis could be marked with steps but they are not essential.

Planting Ornamentals

The private lawn has been developed on the long axis of a connecting rose arch in a simple manner with perennial borders. A seat with an evergreen planting terminates this long axis or a summer house could very well be substituted which would make the garden more livable. The bordered areas represent the very sparse planting of the place before the design was made. Also the dotted lines represent the old verandah on the right now widened; an old verandah on the left eliminated in favour of a porch and the garage which was very badly placed and which for obvious reasons, has been moved to the front of the property on the side street. A well screened drying yard, has been provided also.

If the corner verandah could have been placed more toward the rear a small formal garden would have been developed on the axis of the steps with possibly an informal lawn back of it. As it is, the general usableness of the house and grounds with these changes has been greatly improved.

To paraphrase an old saying "an ounce of preparation is worth a pound of cure" is particularly true when you are considering the planting about the home. All the areas to be planted should be thoroughly manured and dug to a good depth—at least the full depth of the spade. Use manure at the rate of one cubic yard to every 500 square feet.

As the trees and shrubs particularly are to remain in their positions for many years, slovenliness or inadequate preparation will not bring the best results. This preparation should not be left to the last moment but should be attended to well in advance of ordering the stock. For spring planting, the soil can very well be dug in the fall, left in a rough condition over winter, after which and just before planting it can be finally worked down. The soil after spring digging should be carefully firmed with the feet to conserve the moisture. For fall planting the preparation should be considered well ahead in the summer.

Care of Nursery Stock on Arrival

Nothing will avail, as to the preparation of the soil and good planting, if the order on arrival is left lying around. Immediately the bundles of nursery stock arrive they should be placed in a cool situation, watered if necessary and as soon as possible afterwards opened and checked to see if the quan-



Suitable Use of Rambler Rose

tities and varieties are correct. Then they should be planted or if this is not possible for a time they should be immediately heeled in or placed in a cool cellar.

For heeling in select a well drained location and dig a trench deep and wide enough to allow the roots to be held without crowding.

This trench should preferably run east and west so that the trees can be leaned toward the south or southwest. The soil from the trench should be thrown out to form a bank and be sure that you start from the south and work towards the north. Cut the bundles and place the roots of the individual specimens in the bottom of the trench with the tops leaning against the earth bank.

Be sure to keep the varieties separate and spread out the trees so that the earth can be filled in about the roots. Fine moist soil should be packed in around the roots to make a close contact and exclude air. Next heap more soil on the roots and cover a third or most of the tops, stamping it in lightly. If there is danger of rabbits or mice or of drying out, it is advisable to cover the entire tree or shrub. All packing material and grass that might possibly harbor mice should be removed. If the ground is inclined to be dry be sure to moisten the soil about the roots.

Another method of temporary care is to place the stock in a cool cellar. Unpack the order and cover the roots with the damp packing from the box, damp hay or straw, then spread out sacks or canvas over them. Sprinkle only enough water on the trees to keep them from drying out.

Evergreens that are shipped balled and burlapped (the most satisfactory and reliable method) may arrive slightly dried out.

The ball should in this case be dipped in a tub of water until it is thoroughly moistened. If the plants are to be kept a few days before planting they must be stored in a cool place away from sun and wind. The balls of earth must be kept constantly moist and the moisture may be conserved by a covering of moist soil, leaves or straw. Evergreens shipped without the earth balls should be planted as rapidly as possible as they will not successfully stand being stored.

Weather conditions may change suddenly while the order is in transit and your stock may become frozen. In such a case put it in a cool but frost-proof cellar but do not unpack until it is entirely thawed out. No damage will result if the plants are thawed out gradually.

Sometimes through delay in transit, the stock may arrive in a dried out condition and then it will require special care. Two methods of restoring the moisture may be used:—

1. Immerse the whole tree or shrub in water for a few hours until the bark has swelled to normal plumpness or,

2. Bury the whole plant in damp soil for twenty-four hours or more

Great care should be taken with both these methods to avoid leaving the stock buried or immersed too long or it will rot. Just enough to restore the natural moisture is sufficient.

A very successful method is to apply a paper thin coating of paraffin wax, parapin—a trade preparation is better if it can be obtained, over the entire shrub above ground. This will conserve the plant moisture and in most cases the plant will recover.

Trees, Shrubs and Woody Vines:—Presuming that the home gardener has carefully attended to the ground preparation the choice of his material and settled on the arrangement according to previous advice gleaned in this booklet; what are the actual planting operations?

If the following directions are carried out conscientiously there should be no failures.

Dig a hole large enough so that the roots will not be cramped or bent in the least and deep enough so that the subject, when set, is about one half inch below the depth at which it grew in the nursery. This is easily distinguished as there is always a definite line of demarkation, between the parts below and above the soil. In digging throw the first 8 or 10 inches of the top soil to one side and keep it separate. During the digging operation if two are working together, which is best, the subject may be pruned. This may, however, be done immediately before. This pruning consists of first removing all damaged or broken roots and the cutting back of any extra long or tap roots. A slight balancing is advisable but not a shortening back to fit a small hole.

The top may be pruned before or after the planting. Small bushes that can be handled easily or large trees that cannot be conveniently reached afterward are better pruned before planting. Pruning of the top consists of:

- 1. The removal of broken, crossing or weak wood and undesirable sucker growth.
- 2. Shortening back the branches of the head one third to one half to balance the top with the root system. The amount taken off will depend on the vigor of the root system. If the root system is small or badly damaged it is a wise precaution to cut back heavily. Do not shear off the top but rather thin as shown in Illustration 18. Where considerable trimming is done, less heading back will be required.

In the case of most trees, remove all but one leader and endeavour to space the branches to avoid bad crotches. A little shaping may be done but this is usually attended to in the nursery.

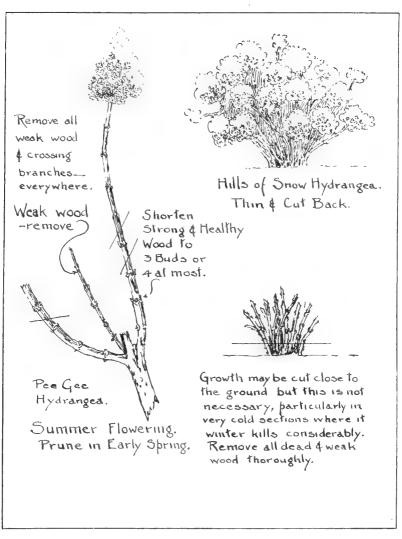


FIGURE 18. PRUNING SHRUBS.

Evergreens are never top pruned and all operations are confined to the removal of extra leaders unless a bushy type of tree is specially required.

Fall planted material may be pruned in the spring especially in the colder sections where there is a tendency to dry out the bark in cold winds and hard winter conditions. The shrub or tree may then be more easily pruned to live wood early and before the buds burst. Vines should be well shortened back and thinned out considerably to the strongest shoots. Those that climb by suckers especially, will only cling with the new growth so that just sufficient old growth should be kept to give the plant a good start.

After the subject has been pruned and placed in the hole, the roots should be spread out and some top soil thrown upon them as the subject is moved up and down an inch or two.

This up and down shaking motion gives the fine soil a chance to settle down well among the fine roots and it is well worth the extra trouble. Do this until the hole is about half filled and then tramp firmly. Throw in the remaining soil and again tramp firmly, using the heel with the toes upraised rather than the ball of the foot or toes. This method produces a much firmer soil with



A Well Arranged Planting in a Backyard

less tramping and one that will withstand the usual test of a sharp jerk (if a subject will come out with a reasonably sharp pull it is not properly set). When the hole is filled and firmed the surface should be cultivated to conserve the moisture. The surplus soil may be scattered or carted away. No mound should be left about the stem as this will shed moisture. A level surface or even a slight depression is advisable. Should the ground Soil. settle which it will not do if prepared and manured well in advance, a little extra soil can always be brought in to fill up. In case of dry weather, water the newly planted material but be sure to restore the mulch. A very good method is to place a mulch of old straw, well rotted manure, rotten leaves or even grass clippings about newly planted material to act as mulch. This treatment may well be continued the first two or three years.

Trees must be staked and if in situations exposed to traffic and damage, should be protected with a wooden or iron boxing.

The spreading of the roots is not quite so important with perennials and if they are very dense and long may be shortened considerably. Place the subject with the crown, the crown is where the buds spring from the root system, just level with the ground surface, as it grew in the nursery. Great care should be taken to avoid covering this crown. The Iris, an exception however, requires rather different treatment. Peonies, Lily-of-the-Valley and some others which bud below the surface are also exceptions and the subject should be studied as to its habits and preferences. The Rhizome of the Iris should ride like a duck on water with the base and roots only covered. Peonies on the other hand thrive best when planted with the buds of the crown two to three inches below the surface of the ground.

Perennials like all other material should be set firmly in the soil and require the same immediate cultivation as for trees and shrubs and similar after-care as to watering and mulching.

When transplanting late in the spring with the foliage well advanced it is advisable to remove a good many of the leaves, particularly on densely headed crowns, as they will otherwise just wilt and not readily regain their freshness. The younger centre growth will recover quickly and carry the plant on more vigorously than if the older leaves had been left on. When transplanting in the fall cut the stalks back to about 3 or 4 to 6 inches. Just enough should be left to identify the plant and hold it in the planting process.



Time to Plant Trees, Shrubs, Woody Vines and Perennials

Spring:—As soon as the ground warms up, right up to a short growth of the leaves. April-May.

Autumn:—As soon as the plants commence to mature and most of the leaves have fallen right up until frost. October-November.

\mathcal{A}			
Distances apart:		Close	
Trees	Example	Planting	Normal
Large	American Elm	30	50-70
Medium	Sugar Maple	25	40
Small	Pin Oak	25	35

Trees in groups can be planted as close as twelve to twenty feet apart for an immediate effect but must be thinned well before they crowd.

B				Natural
Shrubs	Example	Close	Normal	Spread
Large	Wayfaring Tree	3ft.	4-5ft.	5-6ft.
Medium	Van Houttes Spiraea	21/4 ft.	3-4ft.	
Small	Spiraea, Anthony Watere	r		
	and Japanese Barberry	1½-2ft.	2½ft3f	t.



The Purple Fringe or Smoke Tree Softens the Landscape

For a quick effect, for screening or for a dense mass planting shrubs may be planted at the close distances. When they begin to crowd, however, it is highly advisable to thin them somewhat as otherwise a too dense, monotonous mass will result made up of tall and spindly shrubs that lose their lower branches rather readily. A graceful natural effect should be the object.

N.B.—The gardener can very well profit by studying the natural form of specimen shrubs in the open and then endeavour to reach a happy medium between dense crowding and natural growth.

PerennialsExampleDistance ApartLowMoss PinkEdging 4-6 in. Normal 6 in.MediumColumbine12-15 in.TallLarkspur12-18 and 2-2½ ft.

Spread and habit must be studied and taken into consideration as well as the height. The larger growing low perennials will require 9-12 inches while the peony, though of a medium height, is widespread, particularly when in bloom, and requires $2\frac{1}{2}$ to 3 and even 4 feet for its development.

N.B. Distances are not so important with the general run of perennials however as they readily grow into masses. However it is wise to approximate these distances for best results with the newly planted border. An important point in connection with perennials which applies especially to the Iris. Peony and others is to select only young growth for use and discard the old. In many cases young and old are mixed up and cannot be separated readily but in many others this separation can be accomplished. Also choose only the best strains for division. Very often wide difference in quantity of flowers will be observed and it will pay to propagate only the best.

A.—Perennials. In the spring as soon as the shoots show green and preferably can be identified and the earth is warm, up until the foliage is quite advanced. The earlier planting is, however, better as the plants suffer no check at that time.

In the fall they may be planted as soon as the tops mature (usually late September on). This is really the better season as they can be more readily recognized and handled. Seedling plants especially if pot grown can be planted at almost any time throughout the season if plenty of moisture is available either directly after a rain or by the use of the hose. In hot weather shading of some description will help the plants recover more rapidly.

Iris growers claim better results from moving the Iris in July, soon after flowering and peony growers are equally enthusiastic about dividing and planting the Peony in August. These are special plants, however, and require this unusual treatment although later plantings will do very well.

Distances in this case cannot be definitely stated as they are seldom set at regular intervals. The strong growing vines will cover a very large wall surface one or two being sufficient for a house, as for example, the Boston Ivy. The smaller vines as Clematis and Cinnamon grown on trellises may be set much closer—from six to ten feet apart.

B.—Vines. These are woody or semi woody and should be planted when dormant as for shrubs. They require severe pruning at time of planting as the old growth will not cling or twine readily and should be started anew.

N.B. Late planted material of any kind should be given a mulch of straw quite late, after the first permanent freezing of the ground to prevent heaving due to the constant thawing and freezing of winter. The late planting of course does not allow the growth of sufficient roots to anchor the plants firmly.

Upkeep of the Grounds

Well treated and healthy plant growth of all kinds is the first consideration in the well kept garden. Neatness is next. That is neatness of lawns, of lawn and path edges freedom from weeds and a well cultivated look about the soil, as well as freedom from dead flower or seed remains and dead tops.

(Ornamentals in particular). The meaningless clipping of shrubs practiced by many is by no means pruning in its true sense and does more harm than good. An annual pruning is an excellent idea if you know what to do, but ruinous if the idea is merely that some pruning must be done regardless of whether the shrub needs it or not. Pruning is done for four chief reasons:—

- 1. To produce some desired form—the least necessary in natural plantings.
- 2. To cause the plants to develop strong and uniform branches and foliage. This implies the removal of weak wood.
- 3. To produce flower buds.
- 4. To remove injured, diseased or dead branches and to rejuvenate old plants.

Considering them from the standpoint of pruning, flowering shrubs are divided into two classes, spring blooming and summer blooming.

Spring Blooming

Lilacs, Flowering Currants,

Barberry, Kerria,

Exochorda, Most Woody Spireas,

Weigela, Viburnums, Forsythia, Flowering Crab.

Philadelphus,

The list is not complete but will serve as a general guide. With these shrubs the buds are produced the season before and, therefore,

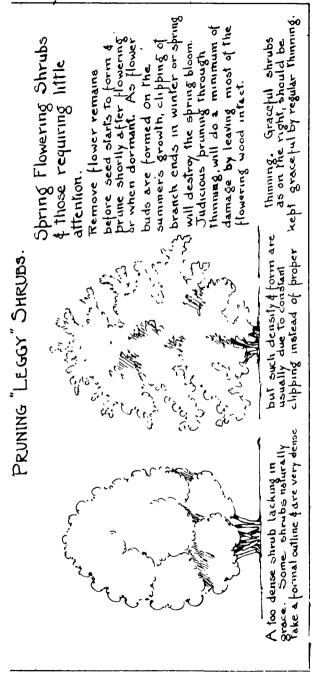


FIGURE 19. PRUNING ORNAMENTALS.

heading in while they are dormant will destroy their bloom. Prune them, therefore, immediately after they have bloomed which will encourage the growth of new flowering wood for the following year.

Summer Blooming

Many Roses, Hibiscus, Spiraea sorbifolia Tamarisk, Hydrangeas Elders.

These shrubs bloom on shoots of the current seasons growth and, therefore, they should be pruned while dormant to produce strong spring and early summer growth. The growth produced after this pruning is the flowering wood. This class of plant thrives on heavy pruning and in fact if a good pruning is not given will produce very weak heads.

The Hydrangeas

Pruning consists of the removal of all weak crossing or twisted wood and the shortening back of the remaining wood of last years growth to two or three buds. (See Figure 19).

The Aborescens varieties are usually treated to an annual cutting back in the spring almost to the ground. In the very coldest sections this shrub will kill back considerably and such drastic treatment will not be necessary but merely a removal of the dead wood. This killing back in the coldest sections has a bearing also on the pruning of the Elders and Tamarisk which sometimes kill almost to the ground. All the dead wood should be removed regardless of how dilapidated the shrub will look and the new growth will spring up very quickly to cover the nakedness as the roots carry over the winter well.

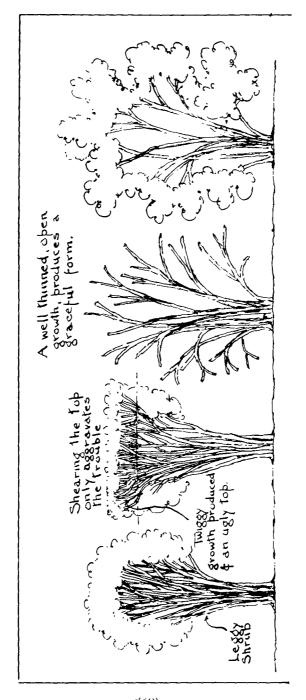
A certain class of shrubs require no pruning whatever with the exception of the removal of very old wood. These are:

Barberries, Mahonia, American Viburnums. Rosa rugosa, Loniceras.

It pays to cut old Rosa rugosas to the ground leaving only the young green growth to spring up and produce the flowering wood. This class of shrubs takes a naturally rounded form and is better for being largely left alone. Removal of the old wood as it passes the desirable blooming stage is all that they need.

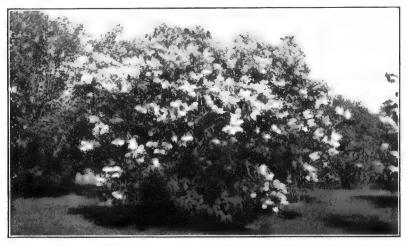
General Pruning Rules

1. The important point in this classification of shrubs is that if the gardener wishes to keep his bushes within a certain form or stature, a knowledge of the flowering habit will keep him from mak-

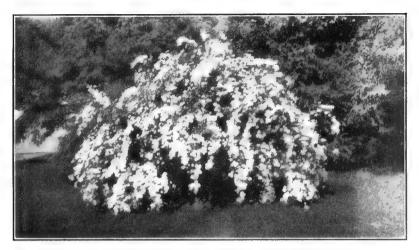


ing mistakes and cutting off the blooming wood. Otherwise and in certain specified varieties the shrubs are best left to grow unretarded.

- 2. A somewhat similar point is this. In the case of the spring flowering shrubs, nature will take care of the production of flowering wood unaided. Under artificial conditions, however, the pruning will aid nature and probably produce more bloom. Under artificial conditions we like to see a regularly branched rather more open form than will result with natural growth and it is this guidance only that should be the aim in pruning.
- 3. A thinning out of old wood, rather than a clipping is desirable, with just sufficient heading in to restrain stronger growing branches and keep them within bounds. Thorough and systematic pruning of this description will prevent "legginess" from developing. This gradual removal of the old wood will keep the shrub young as to branches and in a healthy condition. When the bush begins to crowd or the branches become spindly which is a sign of weakening growth a vigorous heading in and thinning may be desirable. This should be thorough and only a few of the strongest branches should be left. This is often the drastic treatment needed for neglected shrubs full of suckers.
- 4. In the case of old, neglected shrubs a similar thorough thinning of the old wood is called for as well as the younger shoots. When the bush has become leggy and lost its lower branches exposing the bare stems, a vigorous heading back even of quite thick wood is also desirable. Old Honeysuckles, Lilacs and Mockoranges respond quickly to this treatment even though decidedly drastic.
- 5. Never prune shrubs in natural plantings to a flat top, artificial shape or in such a way that the lower branches are removed. A well grown shrub should be clothed right to the ground or just



The Common Lilac-An Old Favorite



Effective Specimen of Van Houtte Spiraea

high enough to clear the lawn-mower or allow for clean cultivation of the entire ground surface.

As mentioned before, do not prune for prunings sake or because of the enjoyment of handling the shears. Study the subject thoroughly and prune regularly and moderately.

Among the ornamentals, a policy of "keeping well" rather than "making well" should prevail as it does among the commercial men, orchardists, truckmen and florists. That is to say become familiar with the troubles and trials of the plant subjects and forestall their effects long before the damage is done. Of course in spite of constant vigilance, spraying may sometimes become a cure but no plant, no matter how successful the cure, can be as vigorous as one that is kept constantly healthy. A certain amount of vitality is lost in the replacement of the damaged parts which should have gone towards making flower or fruit.

The two great enemies of the gardener are insects and diseases and these two are again divided into two general classes: (a) Sucking and chewing insects, (b) Fungus diseases and Bacterial diseases.

An exact knowledge of the cause of the damage, whether insect or disease is absolutely essential as otherwise no cure will result due to peculiarities of each and the remedy for one will have no effect on the other. Some combatative measures are fairly general and inclusive but most are quite specialized and the gardener must know the specific reasons for applying them and the correct time not to mention the correct strength or method. Space will not permit a detailed discussion of this important phase of gardening so the reader is referred to the bulletin mentioned on the back page "Insects of the Flower Garden and Their Control".

List of Trees, Shrubs and Herbaceous Perennials Suitable for Planting

The Province of British Columbia

by

F. E. Buck, B.S.A.,

Associate Professor of Horticulture, University of British Columbia, Vancouver, B.C.

x-For Rock Garden.

SECTION 1. Deciduous shrubs of medium height.

A. For early spring, spring, and early summer effects.

(NOTE: The varieties which follow are attractive in flower, fruit or leaf; are generally easy to transplant and require but moderate care. They are useful for many purposes and are recommended for planting ordinary city properties and farm-house surroundings. They are obtainable from most of the nursery companies and are seldom high priced).

Name

xGarland Flower (Daphne mezereum)
Golden Bell (Forsythia vars.)
Flowering Quince (Cydonia japonica)
Flowering Currant (Ribes sanguineum)
xJasmine (Jasminum nudiflorum)
Japanese Snowball (Viburnum plicatum)
Variegated Leaved Dogwood (Cornus vars.)
Cotoneasters (Cotoneaster Simonsi)
Mock orange (Philadelphus vars.)
Deutzia (Deutzia crenata fl. pl.)
Japanese Roses (Rosa rugosa)
Snow Garland (Spiraea argula)
Bridal Wreath (Spiraea prunifolia)
Van Houtte's Spiraea (Spiraea Van Houttei)
Flowering Almond (Amygdalus vr.)
Variegated Elder (Sambucus aurea)

REMARKS

Purple, very fragrant Flowers before leaves. Scarlet flowers. The native variety. Partly climbing. Large white flowers. For foliage effects. Bright scarlet berries. Very fragrant. Double pink flowers. Large semi-double flowers. Very pleasing. Old fashioned. A wonderful shrub. Very attractive. Fast growing.

B. For late summer and autumn effects.

Weigela (Diervilla late vars.)
Summer Lilac (Buddleia vars.)
Spanish Broom (Cytisus hispanica)
Summer Hydrangea (Hydrangea arborescens)
Four Seasons (Hydrangea paniculata)
Chinese Indigo (Indigofera decora)
Tamarix (Tumarix gallica)
Snowberry (Symphoricarpus)
Large flowered Elder (Sambucus maxima)

Very adaptable. Profuse bloomer. Fragrant. A newer type. Very popular. Late summer. Graceful sprays. White berries. Massive bloom.

SECTION 2. Deciduous shrubs similar to the foregoing but generally larger, their height varying from about 7 feet to 10 feet.

NAME

Lilacs (Syringa vars.)
Bush Honeysuckles (Lonicera tatarica)
Mock Orange (Philadelphus vars.)
Weigela (Diervilla vars.)
Snowball (Viburnum vars.)
Burning Bush (Euonymus europaeus)
Silver Bell (Halesia tetraplera)
Japanese Maples (Acer palmatum)
Bladderwort (Colutea arborescens)
Russian Olive (Eleagnus vars.)
Smoke Tree (Rhus Cotinus)
Magnolia (Magnolia vars.)
Josika's Lilac (Syringa Josikaea)
Persian Lilac (Syringa Persica)

REMARKS

Use the named varsietics Rapid growers.
Sweet scented.
White to crimson flowers.
The old fashioned shrub.
Winter effects.
Flower and foliage.
Handsome foliage.
Effective in fruit.
Silver foliage.
Unique appearance.
Large handsome flowers.
A late flowering lilac.
Very large panicles.

SECTION 3. DWARF SHRUBS FOR FOREGROUND PLANTING, ETC.

Many in this section are suitable for rockeries, for carpet effects and for neat low hedges.

xRock Cotoneaster (Cotoneaster horizontalis)
Globe Flower (Kerria japonica vars.)
Thunberg's Spiraea (Spiraea thunbergi)
Waterer's Spiraea (Spiraea Ant. Waterer)
xDwarf Brooms (Cytisus named vars.)
xJapanese Barberry (Berberis thunbergi)
xSnowberry (Symphoricarpus)
Slender Deutzia (Deutzia gracilis)
xAzaleas (Deciduous Azaleas)
Polyantha Roses (Rosa multiflora vars.)
St. John's-wort (Hypericum vars.)

Very effective in winter. Flowers, stem and leaves. Flowers and foliage. Summer flowering. Very attractive colours. Highly recommended. Winter effects. Neat and attractive. Very beautiful in flower. Beds and borders. Pretty yellow flowers.

SECTION 4. Evergreen shrubs including dwarf conifers.

Many of the following are useful in rockeries and as "specimen plants" on the lawn.

The "Broad-leaved Evergreens" are generally successful and much used in British Columbia, particularly around Vancouver and on Vancouver Island. A few may winter kill where the temperature drops to zero. Many are higher priced than the deciduous types.

A. Broad-Leaved Evergreens.

Rhododendrons in great variety (Named vars.)
xSheep Laurel (Kalmia angustifolia)
Japanese Azaleas (Azalea vars.)
xEvergreen Barberries (Berberis such vars. as
Darwini, dulcis, stenophylla, etc.
Hollies (Ilex in var.)
Cherry Laurel (Laurus laurocerasus)
Portugal Laurel (Laurus lusitanica)
Laurustinus (Viburnum tinus)
Firethorn (Pyracantha var.)
xRose Daphne (Daphne cneorum)
xCotoneaster (Cotoneaster)
Dwarf Box (Buxus vars.)
xAndromeda (Andromeda floribunda)

Most beautiful shrubs. Large pink clusters. Dwarf types. A very useful group of shrubs.

Several types.
Very much used.
Neater foliage.
Winter flowering.
Bush or trailing.
Rockeries and Borders.
Evergreen vars. as microphylla.
For low hedges, etc.
Neat, low growing.





Wier's Cut-leaved Maple is one of the best Weeping Trees

A fine group of Evergreens

В. Coniferous Evergreens, etc.

NAME

Junipers (Juniperus sabina and types) Junipers (Juniperus virginiana) Japanese Cypress (Retinospora or Cypressus

many vars. as filifera, plumosa, etc..) Dwarf Pine (Pinus mughus)

Thuyas or Horticultural vars. of Cedar (Thuya compacta, pyramidalis, aurea and many other

Cypressus (Lawson's Cypress is the best known; many others more beautiful in forms and colours.)

Cedrus or True Cedars (Cedrus deodara, atlantica, and libani)

Yews (Taxus vars.)

SECTION 5. RARER VARIETIES.

Several little known but beautiful shrubs are given in this list. Several may ne. I slight protection.

New Jersey Tea (Ceanothus vars) Caryopteris (Caryopteris) Japanese Camellia (Camellia japonica) Aralia (Aralıa sıeboldı) Abelia (Abelia grandiflora) Pernettya (Pernettya mucronata) Escallonia (Escallonia rubra) Mexican Orange (Chorsya ternata)

Daisy Shrub (Oleana haastı) SECTION 6. HEDGE PLANTS.

Deciduous

Japanese Barberry (Berberis)
Privet, several vars. (Ligustrum) Siberian Pea Shrub (Caragana) Buckthorn (Rhamnus cathartica) Japanese Quince (Cydonia japonica) Hawthorn (Crataegus oxyacantha)

В. Evergreen

Dwarf or Tree Box (Buxus) Hemlock (Tsuga) Cherry laurel (Laurus) Portugal Laurel (Laurus) Holly (Ilex) Evergreen Honeysuckle (Lonicera nitida) Cedars (Thuyas as compacta and wareana) False Box (Pachystima) Tree Ivy (Hedera)

SECTION 7. CLIMBING PLANTS.

Boston Ivy (Ampelopsis Veitchii) Virginian Creeper (Ampelopsis self fastening) xEnglish Ivy (Hedera vars.) Honeysuckles climbing (Lonicera vars.) Wistaria (Wistaria var.) Clematis (Clematis var.)
Trumpet Vine (Bignonia radicans)
Dutchman's Pipe Vine (Aristolochia sipho)
Fleece Vinol Polygonum) Climbing Roses (Many vars.)

Remarks Spreading. Upright growing. Varied, effective foliage effects.

Dark foliage. Use for specimens, rockeries, accents, etc

A semi-hardy group but popular

Cedar of Lebanon group of Evergreens For formal effects.

The blue flowered var. best. Blue flowers autumn. Very early, lovely flowers. Foliage effects. Attractive pink flowers. Attractive fruit. Profuse bloomer. A very choice shrub. Late flowering.

For low Hedges. Very popular. Good all round hedge plant. Makes a neat hedge. Partly flowering. For a firm hedge.

Very neat, slow growing. A lovely hedge, slow growing. Very popular, fast growing. Superior in some respects. Very useful. Neat, highly recommended. Very neat and safe A neat native shrub. For special purposes.

Very compact. Scarlet in autumn. Much used. Fragrant. Most beautiful. Many named vars. Large scarlet flowers. Very large leaves. Pink flowers. Make a careful choice

SECTION 8. Trees.

A. Small to medium sized deciduous trees.

This list includes varieties which are generally attractive in flowers, leaf or fruit. In the main they transplant successfully and are quite hardy in the Lower Mainland and on Vancouver Island. They are advised for "lawn specimens" and as shade trees, also for certain types of street-tree planting, and for shrubbery borders, etc.

Name

xFlowering Dogwood (Cornus Nuttalli)
Flowering Plum (Prunus Pissardi)
xHawthorn (Crataegus vars.)
Golden Chain (Laburnum Adami)
Flowering Crabs (Pyrus Malus vars)
Siberian Pea Tree (Caragana arborescens)
Catalpa (Catalpa speciosa)
Mountain Ash (Pyrus aucuparia)
Japanese Cherry (Prunus vars.)
Manitoba Maple (Acer Negundo vg.
Magnolia (Magnolia Soulangeana)

REMARKS
The native Dogwood.
Flowers and purple foliage.
Very free flowering.
Yellow flowers.
Beautiful flowers and fruit.
Very hardy.
Large leaves, fine flowers.
Attractive red berries)
Wonderful blossoms.
Variagated foliage.
Large flowers in profusion.

B. Large sized deciduous trees.

Should be used chiefly on large properties and for "street-tree planting".

Plane Tree (Platanus orientalis)
Red Oak (Quercus rubra)
Tulip Tree (Liriodendron tulipifera)
Linden or Basswood (Tilia platyphyllos)
American Elm (Ulmus americana)
European Beech (Fagus sylvatica)
Copper Beech (Fagus sylvatica purpurea)
Cutleaf Birch (Betula laciniata)
White Birch (Betula alba)
Sugar Maple (Acer saccharinum)
Silver Maple (Acer saccharinum dasycarpum)
Norway Maple (Acer platanoides)
Sycamore Maple (Acer pseudoplatanus)
Lombardy Poplar (Populus pyramidalis)
Weeping Willow (Salix babylonica)

Large spreading tree Quick growing.
Unique leaves.
Heart-shaped leaves.
Large and graceful
Large and spreading.
Spreading.
Attractive colour.
Graceful and attractive.
Very useful.
The best of the Maples.
The largest of the Maples.
A round-headed type.
Vigorous grower
Spire-like.
The best Weeping Willow.

C. Large sized evergreen trees.

Yellow or Bull Pine (Pinus ponderosa)
Engelmann's Spruce (Picea Englemanni)
Blue Spruce (Picea pungens kosleriana)
Grand Fir (Abies grandis)
Nordmann's Fir (Abies Nordmanniana)
Nootka Cypress (Chamaecyparis)
Lawson's Cypress (Cupressus lawsoniana)
Giant Redwood (Sequoia sempervirens)
Cryptomeria (Cryptomeria japonica)

A picturesque tree.
Symmetrical habit.
The popular Blue Spruce.
Fine native Fir
Bluish colour.
The native Cypress.
Beautiful form.
Very large.
A handsome tree.

PERENNIALS

LATIN NAME
Achillea ptarmica, The Pearl
Althaea rosea
xAquilegia in variety
Aruncus in variety
Aubretia in variety
xAlyssum saxatile
Anchusa italica

COMMON NAME Sneezewort Hollyhock Columbine Spiraea Aubretia Goldentuft Bugloss

xCampanula in variety Chrysanthemum Clematis recta Campanula glomerata Coreopsis lanceolata Coreopsis grandiflora Chrysanthemum coccineum Chrysanthemum maximum Delphinium in variety Dianthus in variety Doronicum in variety xEryngium alpinum Filipendula in variety Gaillardia aristata Geranium ibericum platypetalum Gypsophila in variety Gypsophila paniculata Galega officinalis Helenium in variety Hemerocallis in variety Hemerocallis flava Iris, tall bearded, in variety Lupinus in variety Lychnis in variety xLilium, canadense xLilium umbellatum Limonium latifolia (Statice) Paeonia in variety Pentstemon in variety xPhlox in variety Platycodon grandiflorum Ranunculus acris flore pleno x Thalictrum in variety x Veronica in variety

x Viola, fancy and fufted

COMMON NAME

Beliflower Chrysanthemum **Bush Clematis** Bellflower Tickseed Large-flowered Tickseed Pyrethrum Shasta Daisy Larkspur Pink Leopard's Bane Alpine Sea Holly Spiraca Blanket Flower Large-flowered Cranesbill Baby's Breath Baby's Breath Common Goatsrue Sneezeweed Davlily Lemon Daylily Iris Lupine Lychnis Canada Lilv Lily Big Leaf Sea Lavender Peony Penstemon Phlox Balloon flower Double Buttercup

Meadow-rue Speedwell Viola



Syringa or Mock Orange

The Prairie Provinces-Manitoba, Saskatchewan and Alberta

by

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Trees—Deciduous

Acer negundo
Betula papyrifera
Fraxinus lanceolata
Fraxinus americana
Populus balsamifera
" candicans
" deltoides

" certinensis and petrowskyana

Salix aculifolia
"penlandra
"vitellina
Sorbus americana
Tilia americana
Prunus pennsylvanica
"virginiuna

Ulmus americana

Abies balsamea

Boxelder or Manitoba Maple.

Paper Birch
Green Ash
White Ash
Balsam poplar
Balm of Gilead
Cottonwood
Russian poplar
Acute leaved Willow
Laurel leaf Willow 12-16 ft.
Golden Willow

American Mountain Ash Basswood Pin Cherry Choke Cherry American Elm

TREES---EVERGREEN CONIFEROUS (*DECIDUOUS)

*Larix larıcina
*Larix sıbirica
Picea canadensıs
'' pungens
Pinus banksiana
'' cembra
'' murrayana
'' sylvestrıs
'' mughus
Thuya occidentalis

Balsam Fir American Larch Siberian Larch White Spruce Colorado Blue Spruce Jack Pine Swiss Stone Pine Lodgepole Pine Scotch Pine Mugho Pine Arborvitae

Shrubs—Deciduous

Acer ginnala Acer tataricum Amelanchier canadensis Caragana arborescens Malus baccata Prunus americana Prunus melanocarpa Amur Maple
Tartarian Maple
Downy Shadblow
Siberian Pea-Tree
Siberian Crab
American Plum
Black Western Chokecherry

SHRUBS — DECIDUOUS Prunus nigra Prunus pennsylvanica Shepherdia argentea Syringa japonica Viburnum lentago.

Caragana frutescens
Cornus alba
Cornus stolonifera
Elaeagnus argentea
Lonicera bella
Lonicera tatarica
Rhamnus frangula
Ribes alpinum
Sambucus pubens
Syringa amurensis
Syringa josikaea
Syringa villosa
Syringa vulgaris
Viburnum americanum
Viburnum lantana

Amygdalus nana Caragana pygmaea Cotoneaster acutifolia Cotoneaster integerrima Halımodendron halodendron Lonicera spinosa var. Alberti Physocarpus opulifolius Potentilla fruticosa Ribes aureum Ribes odoratum Rosa foetida (Harrison's yellow and Persian Yellow-best varieties) Rosa rubrifolia Rosa rugosa Kamschatka, Hansa, F. J. Grootendorst and Pink Grootendorst are excellent hardy varieties.

LATIN NAME

Rosa spinosissima
Shepherdia canadensis
Sorbaria sorbifolia
(Spiraea sorbifolia)
Spiraea alba
Spiraea argula
Spiraea billiardi
Spiraea billiardi
Spiraea bumalda
Spiraea flexuosa
Spiraea froebeli
Spiraea pikowiensis
Spiraea latifolia
Spiraea trichocarpa
Spiraea Van Houtlei
Symphoricarpus occidentalis

SHRUBS -- EVERGREEN
Juniperus communis montana
Juniperus horizontalis

HARDY WOODY CLIMBERS Ampelopsis quinquefolia Clematis ligusticifolia Clematis tangutica Canada Plum Pin Cherry Silver Buffalo Berry Japenese Tree Lilac Nannyberry

Russian Pea-Tree
Tartarian Dogwood
Red Osier Dogwood
Silverberry
Belle Honeysuckle
Tartarian Honeysuckle (in variety)
Glossy Buckthorn
Mountain Currant
Scarlet Elder
Manchurian Lilac
Hungarian Lilac
Late Lilac
Common Lilac (in variety)
American Cranberry Bush
Wayfaring Tree

Russian Almond Dwarf Pea-Tree Peking Cotoneaster European Cotoneaster Salt-Tree Albert Honeysuckle Ninc-Bark Shrubby Cinquefoil Slender Golden Currant Golden Currant Austrian Briar

Red Leaf Rose Rugosa Rose (Japanese Rose) Rugosa Hybrids

COMMON NAME Scotch Rose Russet Buffalo Berry Ural False Spirea (Ash leaved Spirea) Meadow Spirea Buffald Spirea Bumalda spirea Germander Spirea Froebel Spirea Pikow Spirea Pink Meadow Spirea Korean Spirea Van Houtte Spirea Western Snowberry

Mountain Juniper Creeping Juniper

Virginia Creeper Western Virgin's-Bower Golden Clematis

SHRUBS FOR DIFFERENT NEEDS

FOR TALL UNTRIMMED HEDGES

Amelanchier canadensis Caragana arborescens Shepherdia argentea Downy Shadblow Siberian Pea-Tree Silver Buffaloberry

FOR UNTRIMMED HEDGES SIX TO TEN FEET IN HEIGHT.

Lonicera bella Lonicera tatarica Syringa josikaea Syringa villosa Syringa vulgaris Belle Honeysuckle
Tartarian Honeysuckle
Hungarian Lilac
Late Lilac
Common Lilac

FOR TRIMMED HEDGES

MEDIUM (four to six feet in height)
Caragana arborescens
Picea canadensis

Siberian Pea Tree White Spruce

Low not over four feet

Caragana pygmaea Cotoneaster acutifolia Cotoneaster integerrima Potentilla fruticosa Symphoricorpus occidentalis Dwarf Pea-Tree Peking Cotoneaster European Cotoneaster Shrubby Cinquefoil Western Snowberry

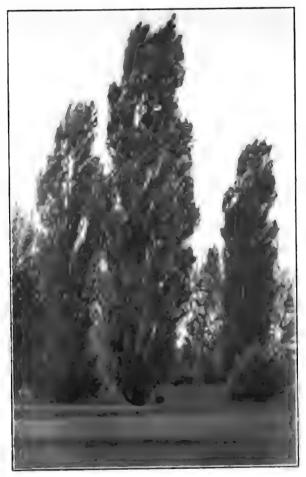
PERENNIALS

LATIN NAME

Aconstum nabellus Althaea rosea Aquilegia chrysantha Aquilegia in variety Aster in variety Campanula carpatica Centaurea montana Chrysanthemum coccineum Chrysanthemum maximum Clematis recta Coreopsis lanceolata Delphinium grandistorum Delphinium in variety Dianthus deltoides Dicentra spectabilis Doronicum blantagineum Eryngium alpinum Gypsophila paniculata Helianthus scaberrimus Hemerocallis aurantiaca Iberis sempervirens Iris, tall bearded, in variety Lilium davuricum Lilium tenuifolium Lilium tigrinum Lilium umbellatum Lychnis chalcedonica Paeonia in variety Papaver nudicaule Papaver orientale Phlox in variety Polemonium caeruleum Rudbeckia laciniata flore pleno Thalictrum adiantifolium Thalictrum glaucum

Veronica spicata

COMMON NAME Monkshood Hollyhock Golden Columbine Columbine Aster Carpathian Bellflower Centaurea Pyrethrum Shasta Daisy **Bush Clematis** Tickweed Larkspur Larkspur Maiden Pink Bleeding Heart Leopard's Bane Alpine Sea Holly Baby's Breath Sunflower Daylily Perennial Candytuft Umbrella Lilv Coral Lily Tiger Lily Lily Maltese Cross Peony Iceland Poppy Oriental Poppy Phlox Jacob's Ladder Golden Glow Meadow-rue Dusty Meadow-rue Spike Speedwell



A fine grouping of Lombardy Poplar

The Provinces of Ontario and Quebec

bv

A. H. Tomlinson, B.S.A., Assistant Prof. of Horticulture, Ontario Agricultural College, Guelph, Ont.

and

T. G. Bunting, B.S.A., Prof. of Horticulture, Macdonald College, Quebec.

LATIN NAME Trees—Deciduous

Acer saccharinum (dasycarbum)

(dasycarpum) Wieri

platanoides

pseudo-platanus

saccharum

Aesculue hippocastanum Alnus glutinosa

Betula lutea

pendula laciniata

papyrifera

Chionanthus virginica Crataegus coccinea

oxyacantha

Fraxinus americana lanceolata

Ouercus alba

coccinea

palustris Sorbus aucuparia

Tilia americana

Ulmus americana campestris

Trees—Evergreen

Abies balsamea

concolor

Juniperus virginiana Larix europaea

Picea alba

" excelsa " pungens

Pinus austriaca

mughus

strobus

sylvestris Taxus canadensis

Thuya occidentalis

occidentalis pyramidalis

Tsuga canadensis

SHRUBS

Berberis thunbergi atropurpurea Berberis thunbergi Caragana arborescens Caragana pygmaea Cotoneaster acutifolia

COMMON NAME

Silver Maple Wier's Cut-leaved Maple Norway Maple Sycamore Maple Sugar Maple Horse Chestnut European Alder Yellow Birch Cutleaf Weeping Birch Canoe Birch White Fringe Tree Thicket Hawthorn English Hawthorn White Ash Green Ash White Oak Scarlet Oak Pin Oak European Mountain Ash American Linden American Elm

Balsam Fir White Fir Red Cedar European Larch White Spruce Norway Spruce Colorado Blue Spruce Austrian Pine Mugho Pine White Pine Scotch Pine Canadian Yew American Arbor-vitae Pyramidal Arbor-vitae Canada Hemlock

English Elm

Purple-leaved Japanese Barberry Japanese Barberry Siberian Pea Tree Dwarf Pea Shrub Peking Cotoneaster

Cotoneaster divaricata Deutzia lemoinei Euonymus europeus Euonymus alatus Forsythia intermedia Hydrangea arborescens Hydrangea paniculata grandiflora Kerria japonica Ligustrum ibota (southern Ontario only) Ligustrum amurense Lonicera morrowii Lonicera tatarica Philadelphus coronarius Philadelphus lemoinei Philadelphus -named varieties Rhamnus frangula Rhus canadensis Rosa rugosa Rosa hugonis Sambucus canadensis Spirea Anthony Waterer Spiraea Van Houttei Symphoricarpus racemosus Symphoricarpus vulgaris Syringea japonica Syringa persica Syringa vulgaris named varieties Viburnum lentago Viburnum lantana Viburnum tomentosum Cornus alternifolia Cornus Mas Cornus sanguinea Cornus stolonifera Cornus stolonifera var. flatriamea Elaeagnus angustifolia Diervilla Eva Rathke

COMMON NAME

Spreading Cotoneaster Lemoine Deutzia European Burning Bush Winged or cork barked enonymus Border Forsythia Snowball Hydrangea Peegee Hydrangea Kerria Ibota Privet Amur Privet Morrow Honeysuckle Tartarian Honeysuckle Sweet Mockorange Lemoine Mockorange

Glossy Buckthorn Fragrant Sumac Japanese Rose Hugonis Rose American Elder Anthony Waterer Spiraea Van Houtte Spiraea Common Snowberry Coralberry Japanese Tree Lilac Persian Lilac Common Lilac Nannyberry Wayfaring Tree Doublefile Viburnum Pagoda Dogwood Cornelian Cherry Bloodtwig Dogwood Red-osier Dogwood Golden Twig Dogwood Russian Olive Eva Rathke Weigela Pink Weigela

PERENNIALS

Althaea rosea Anchusa barrelieri Anchusa italica, Dropmore variety Aquilegia in variety Bellis perennis Campanula carpatica Campanula persicifolia Campanula pyramidalis Centaurea montana Chrysanthemum coccineum Chrysanthemum maximum Clematis recta Delphinium in variety Dianthus barbatus Dianthus plumarius Dictamnus albus Echinacea purpurea Gaillardia aristata Helianthus in variety Helenium autumnale Hemerocallis in variety Iris orientalis

Diervilla rosea

Hollyhock Bugloss Bugloss Columbine English Daisy Carpathian Bellflower Peach-leaved Bellflower Chimney Bellflower Centaurea Pvrethrum Shasta Daisy **Bush Clematis** Larkspur Sweet William Grass Pink Gas Plant Purple Cone Flower Blanket Flower Sun Flower Sneezewood Daylily Oriental Iris

Iris sibirica
Iris, Japanese, in variety
Lilium in variety
Lupinus polyphyllus in variety
Lychnis chalcedonica
Paeonia in variety
Papaver nudicaule
Papaver orientale
Phlox in variety
Platycodon grandiflorum
Primula polyantha
Trollius in variety
Veronica in variety

COMMON NAME Siberian Iris

Lily
Perennial Lupine
Maltese Cross
Peony
Iceland Poppy
Oriental Poppy
Phlox
Balloon Flower
Polyantha
Globe Flower
Speedwell

The Maritime Provinces

by

W. S. Blair, Superintendent, Experimental Station, Kentville, N.S.

FIVE BEST LARGE TREES

Acer saccharum
Ulmus americana
Betula papyrifera
Quercus rubra
Tilia americana

Sugar Maple American Elm Canoe Birch Red Oak American Linden or Basswood

FIVE BEST SMALL TREES

Sorbus aucuparia Syringa japonica Acer ginnala Crataegus oxyacantha Rhus typhina European Mountain Ash Japanese Tree Lilac Amur Maple English Hawthorn Staghorn Sumac

FIVE BEST LARGE EVERGREEN TREES

Abies concolor Picea canadensis Picea pungens Pinus nigra var. austriaca Pseudotsuga douglasii White or Silver Fir White Spruce Colorado Blue Spruce Austrian Pine Douglas Fir

FIVE BEST SMALL EVERGREENS

Pinus montana mughus Juniperus sabina Retinospora pisifera filifera Thuja occidentalis Wareana Thuja occidentalis pyramidalis Mugho Pine Savin Juniper Threadlike Retinospora Siberian Arborvitae Pyramidal Arborvitae

TWENTY-THREE BEST SHRUBS

Philadelphus coronarius Hydrangea paniculata grandiflora

Berberis thunbergi Hydrangea arborescens grandiftora Lonicera tatarica speciosa

Rosa rugosa Spiraea arguta Spiraea van houttei Mock Orange or Syringa Large-flowered Japanese Hydrangea Japanese Barberry Hills of Snow Hydrangea Tartarian Bush Honeysuckle (rose) Japanese Rose Dwarf Bridal Wreath Spirea Van Houitte's Spirea

Spiraea japonica, Anthony Waterer Symphoricarpus racemosus Ribes aureum

Robinia hispida
Forsythia intermedia
Cornus alba sibirica
Syringa vulgaris
Caragana arborescens
Caragana pygmaea
Lonicera morrowii
Sambucus nigra var. aurea
Rhus colinus alropurpurea
Physocarpus opulifolia aurea
Diervilla hybrida
Daphne mezereum

COMMON NAME

Dwarf Late-flowering Spirea Snowberry Sweet-scented Yellow-flowering Currant Rose Acacia Golden Bell Red Siberian Dogwood Common Lilac Siberian Pea Tree Dwarf Siberian Pea Tree Japanese Honeysuckle Golden Elder The Smoke Tree Golden Spirea Weigelia Mezereum

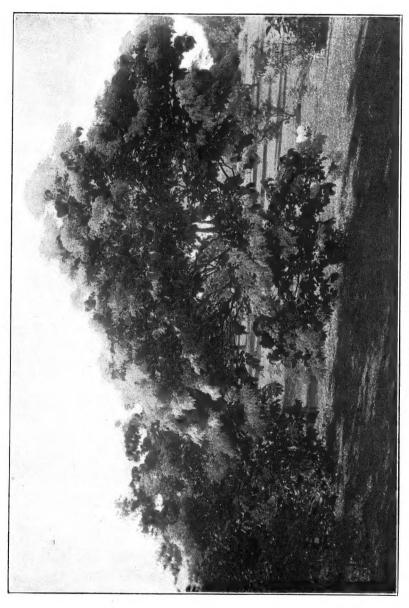
THIRTY BEST PERENNIALS

Aconstum napellus Alyssum saxatile Aquilegia in variety Arabis alpina flore pleno Aster novi-belgii Aster novae-angliue Aubretia in variety Campanula in variety Chrysanthemum coccineum Chrysanthemum maximum Delphinium in variety Dianthus in variety Dicentra spectabilis Dictamnus albus Filipendula ulmaria Filipendula venusta Gypsophila paniculata Helenium in variety Heuchera in variety Iris, tall bearded, in variety Lilium canadense Lupinus polyphyllus in variety Lychnis chalcedonica Paeonia in variety Papaver nudicaule Papaver orientale Phlox in variety Ranunculus acris flore pleno Rudbeckia laciniata flore pleno Veronica in variety

Monkshood Goldentuft Columbine Double Rock Cress Aster

Bellflower Pyrethrum Shasta Daisy Larkspur Pinks Bleeding Heart Gas Plant Spiraea Spiraea Baby's Breath Sneezeweed

Canada Lily Lupine Maltese Cross Peony Iceland Poppy Oriental Poppy Phlox Double Buttercup Golden Glow Speedwell





PRICE 25c